

AD-A074 617

AMMANN AND WHITNEY NEW YORK

F/6 18/3

SCIENTIFIC DIRECTOR'S REPORT OF ATOMIC WEAPON TESTS AT ENIWETOK--ETC(U)

NOV 51

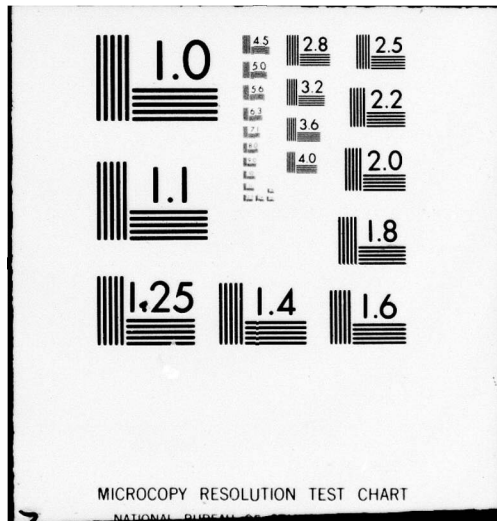
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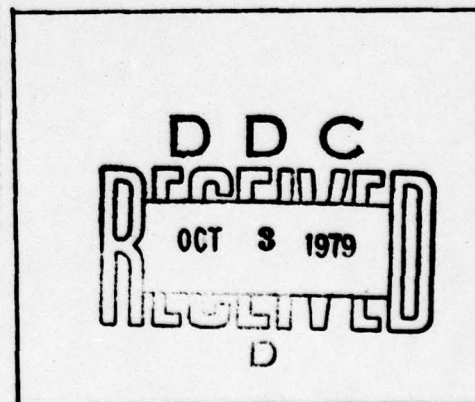
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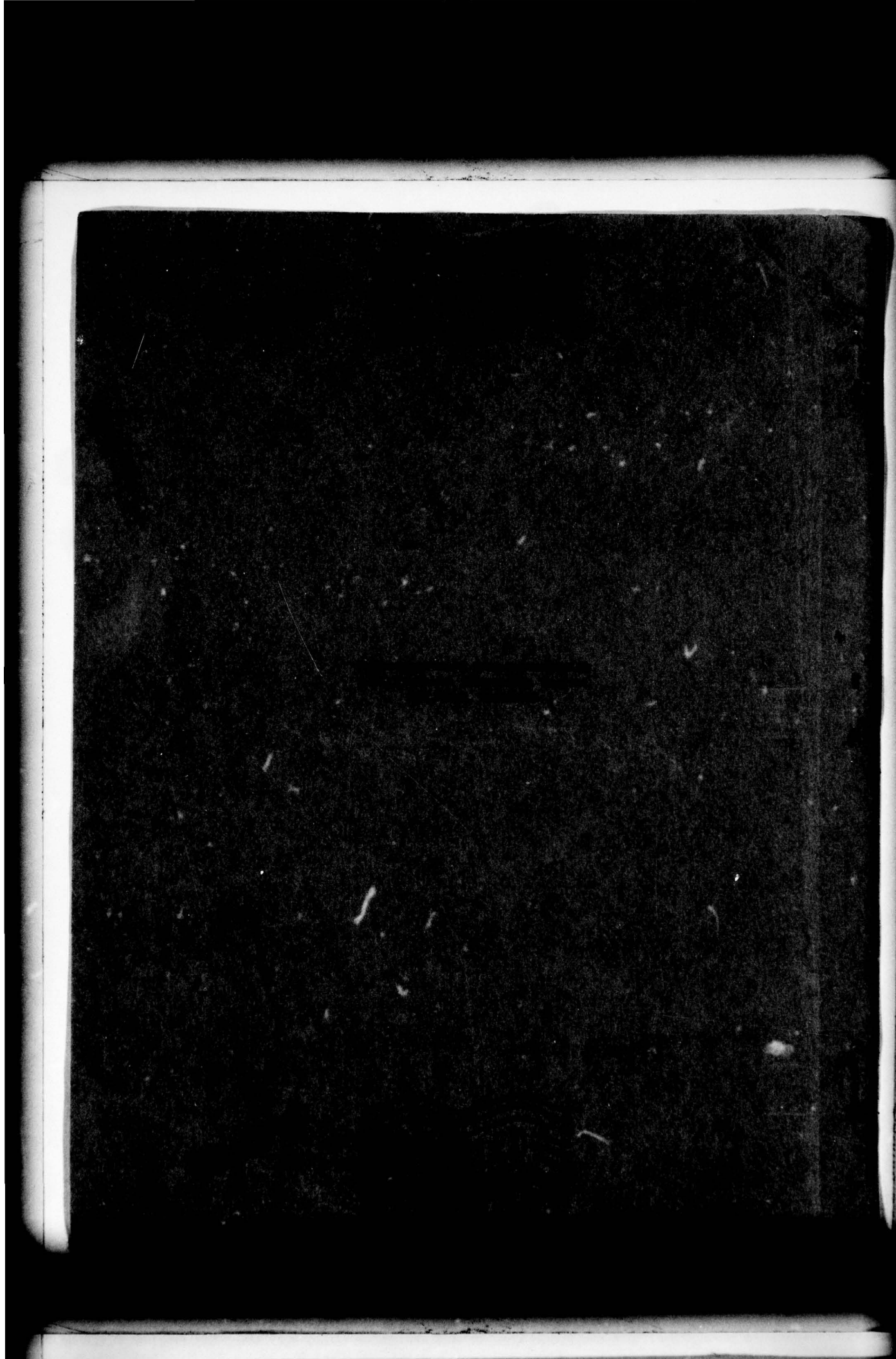
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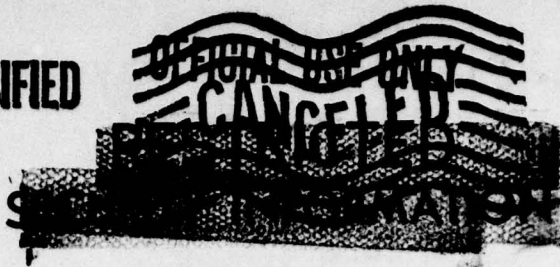


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This document consists of 21 pages (counting all preliminary pages)

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WT-60(REF.) is divided into four parts as follows:

Part I - Pages 1 through 75

Part II - Pages 76 through 90

Part III - Pages 91 through 110

Part IV - Pages 111 through 130

## Scientific Director's Report of Atomic Weapon Tests at Eniwetok, 1951

Annex 3.1

U. S. Army Structures

Appendix 2 As-built Construction

This material contains information affecting the national defense of the United States within the meaning of the espionage laws Title 18 U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.



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# U. S. ARMY STRUCTURES

## Appendix 2

### As-built Construction

by

AMMANN & WHITNEY  
Consulting Engineers

Approved by: SHERWOOD B. SMITH  
Director, Program 3

Approved by: ALVIN C. GRAVES  
Scientific Director

New York, New York  
November 1951

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[illegible]

Hand-drawn technical drawing of a door latch assembly. The drawing shows a side view of the latch mechanism with various dimensions and annotations.

**Dimensions:**

- Top horizontal dimensions:  $3\frac{5}{8}"$ ,  $2'-6" M.O.$ ,  $2\frac{1}{2}"$
- Top horizontal dimensions (below M.O.):  $1'-3"$ ,  $1'-8"$
- Bottom horizontal dimensions:  $1'-6\frac{1}{2}"$ ,  $1'-4\frac{1}{2}"$
- Vertical dimensions on the left:  $16'-4'-8"$ ,  $1'-6\frac{1}{2}"$
- Vertical dimensions on the right:  $16'-0'-0"$
- Small vertical dimensions:  $1'-3"$ ,  $1'-8"$

**Annotations:**

- Top left:  $2\frac{1}{4}"-1'-6"$  Anchor Strap one each side of  $1" M$
- Bottom left:  $2\frac{3}{16}"-1'-3"$  Anchor Strap one of each  $1" M$
- Right side:  $1'-6"-2\frac{1}{2}"$  Anchor Straps one strap each side latch
- Internal labels:  $14'-9\frac{1}{8}"$  Cut to fit,  $12'-9\frac{1}{8}"$  Cut to fit,  $1'-6\frac{1}{2}"$  Cut to fit
- Other labels:  $1'-3"$ ,  $1'-8"$ ,  $1'-6\frac{1}{2}"$ ,  $1'-4\frac{1}{2}"$



ANCHOR STRIPS

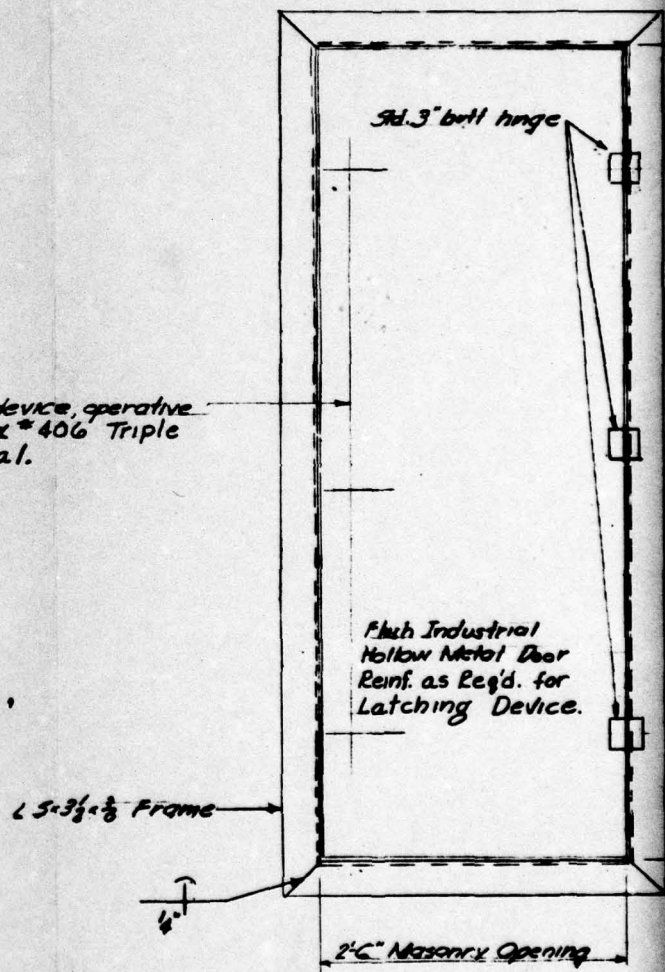
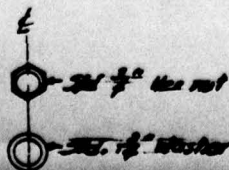
Anchor Straps @ 6" o.c. from corners

Commercial 3pt latching device, operative both sides. RICHARD WILCOX #406 Triple latching device or equal.

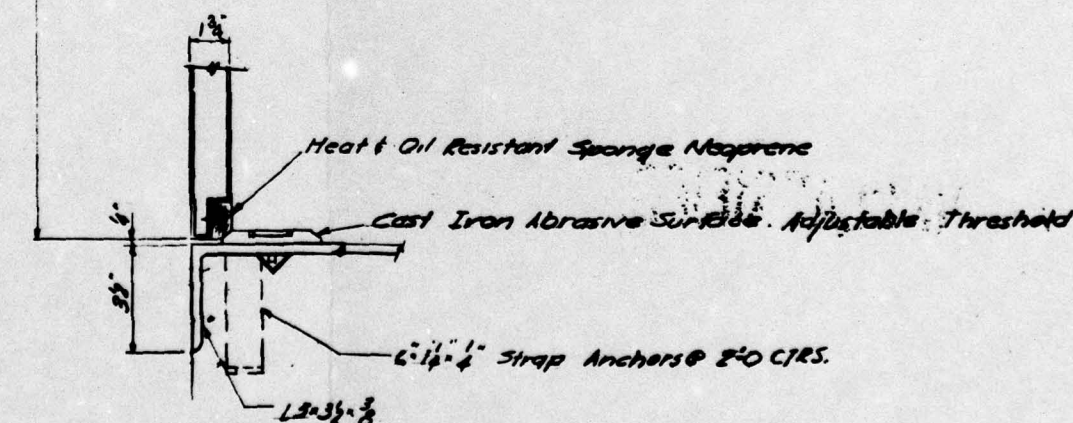
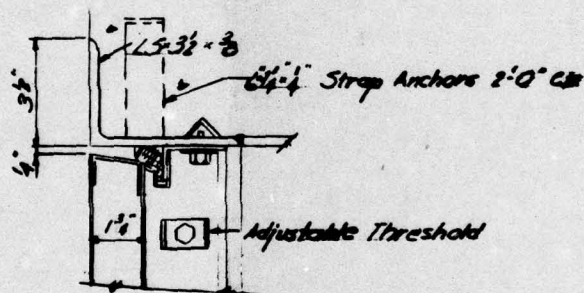
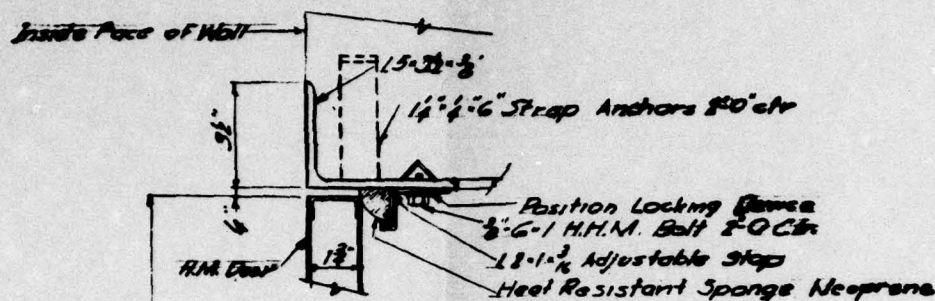
Flg of  $\perp$  to web to admit flg & of  $\perp$  and weld as unit

Anchor Straps @ 6" o.c. & 6" from corners

ch center



INTERIOR DOOR "B"



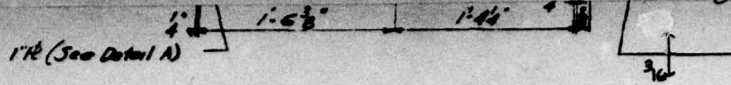
DETAILS OF INTERIOR DOOR "B"

Scale 3" = 1'-0"

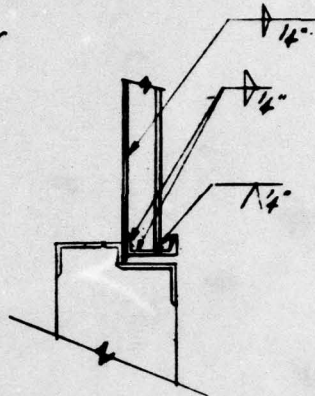
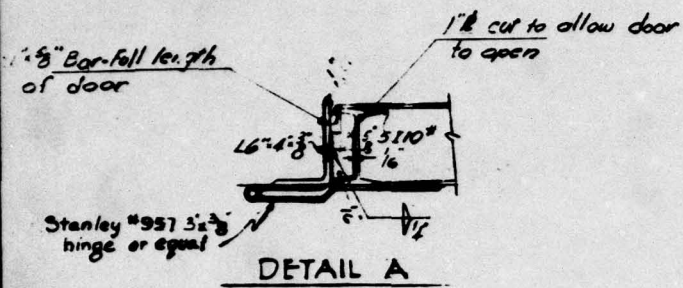
REFERENCE DRAWINGS (DRAWINGS No. 60-09-11)

Sheet 1. Underground Test Shelter. General Plan, Sections & Details  
 Sheet 2. Underground Test Shelter. Concrete & Reinforcing Details

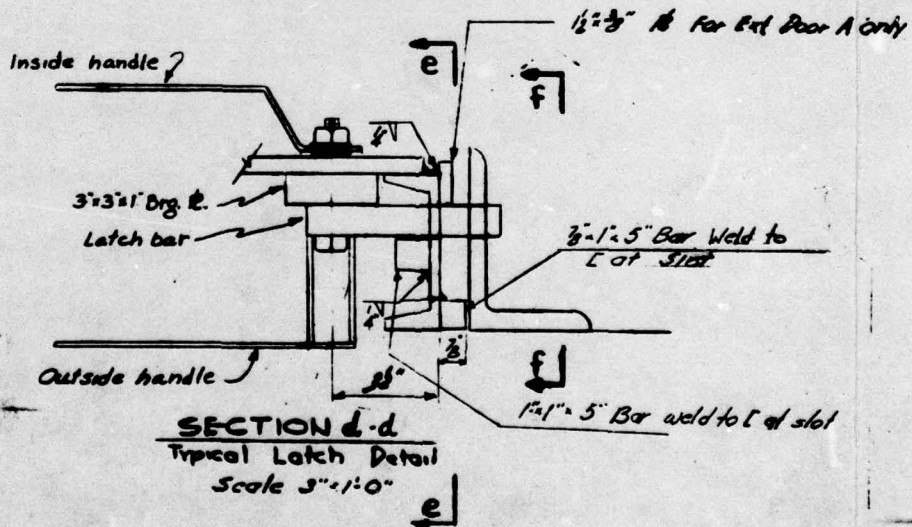


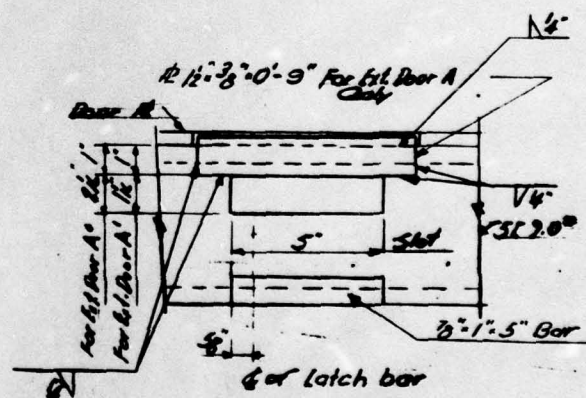


**SECTION a-a**



**SECTION c-c**

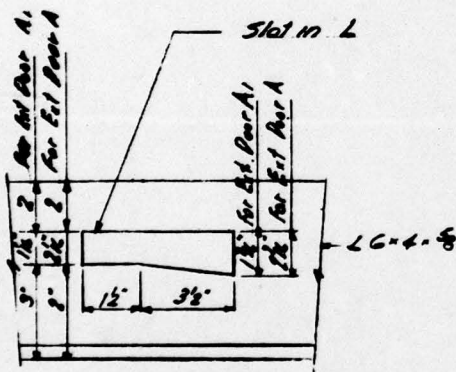




**FIG. A2.45**

**FIG. A2.45**

2



SECTION f-f

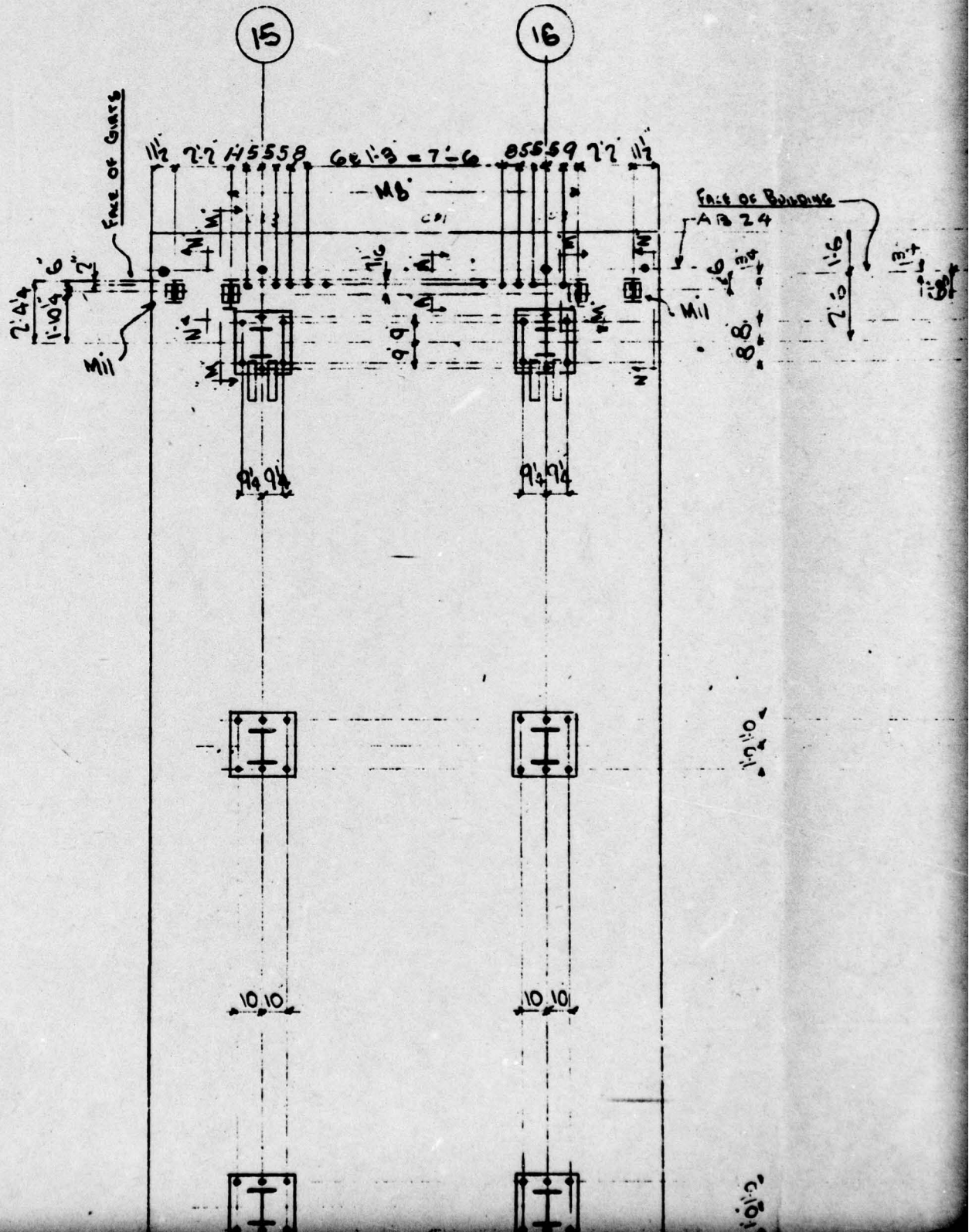
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C	Final Revision to match As-Built conditions	18	6-6-51
B	Misc changes as noted to conform to approved shop drawings	18	7-6-51
A	General corrections & revisions	116	3-17-50
SYM.	DESCRIPTION	APPROVAL	
REVISIONS			
AMMANN & WHITNEY CONSULTING ENGINEERS 76 NINTH AVENUE NEW YORK 11, N. Y.		DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS MILITARY CONSTRUCTION-ENGINEERING DIVISION WASHINGTON, D. C.	
DRAWN BY NB		UNDERGROUND TEST SHELTER DOOR DETAILS	
TRACED BY			
CHECKED BY J.P.			
SUBMITTED B. Anderson			
APPROVED [Signature]		APPROVED M. D. W. [Signature]	
DATE 24 JAN. 1950			
APPROVED FOR		SCALE: 1/4" = 1'-0"	
DATE		SHEET 3 OF 3	

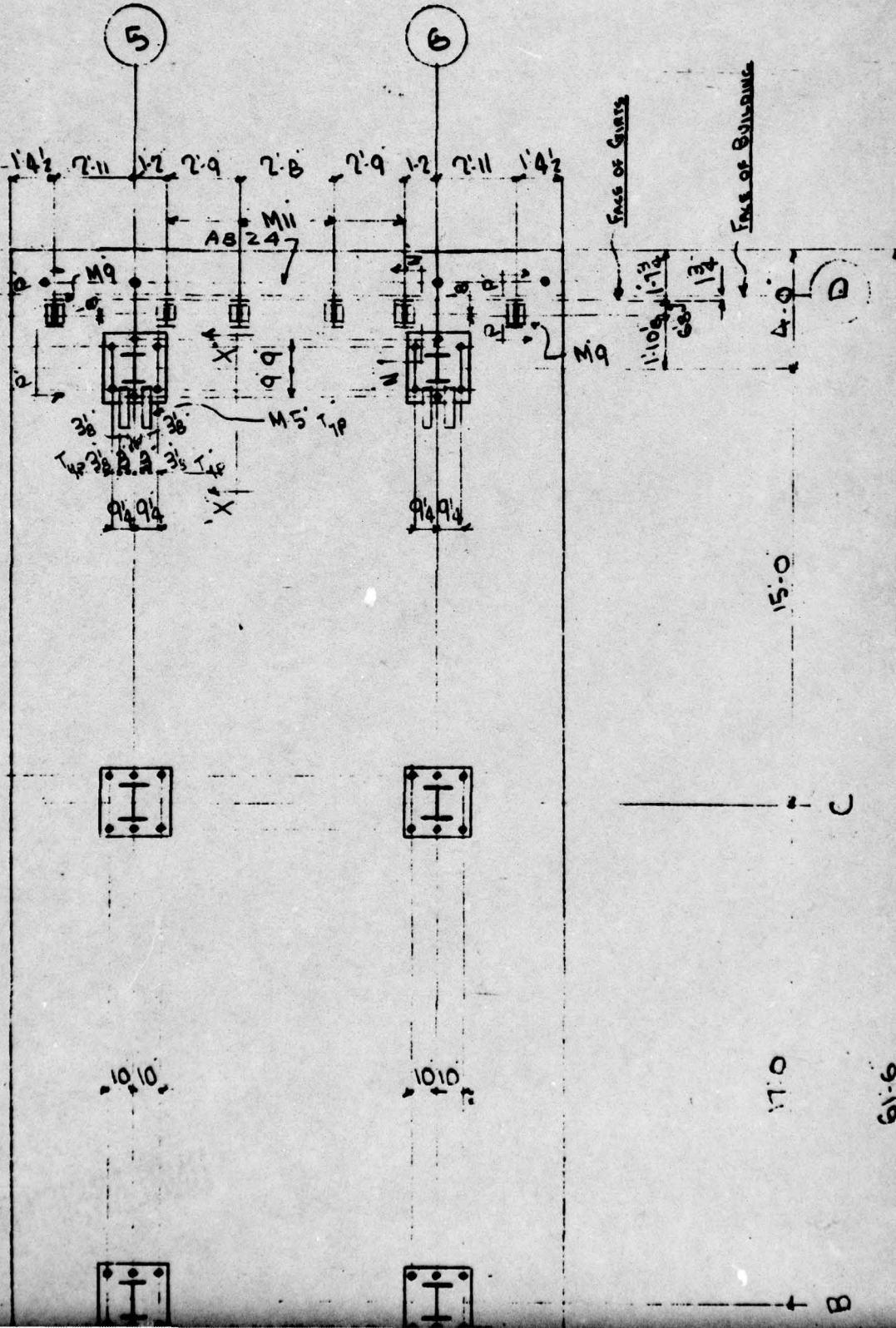
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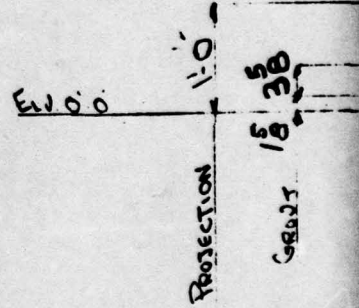
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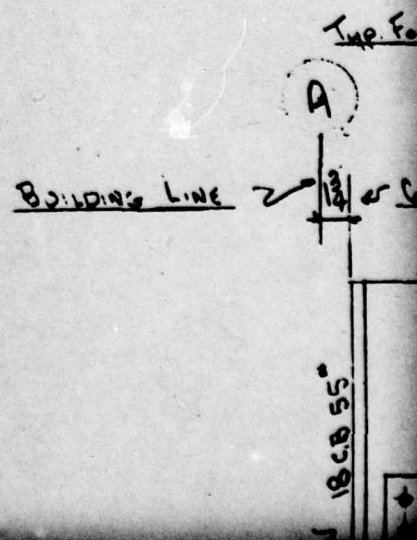
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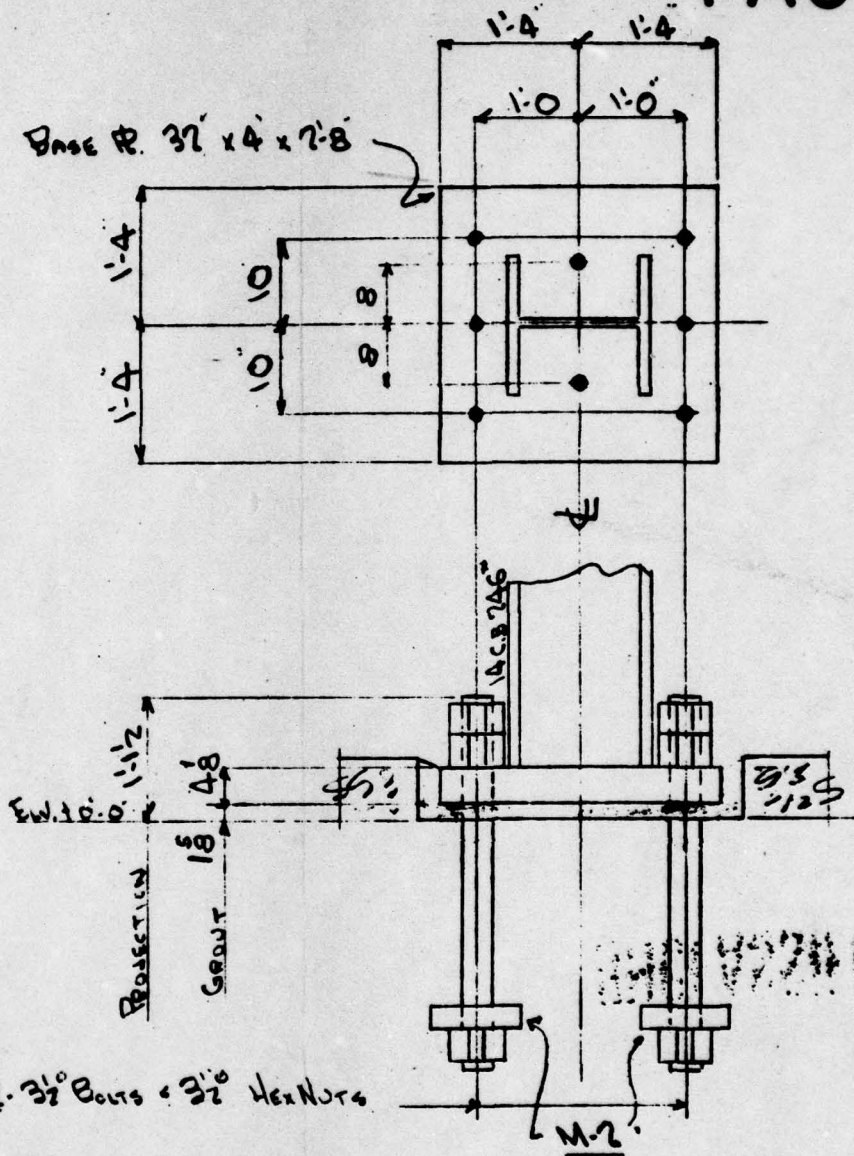
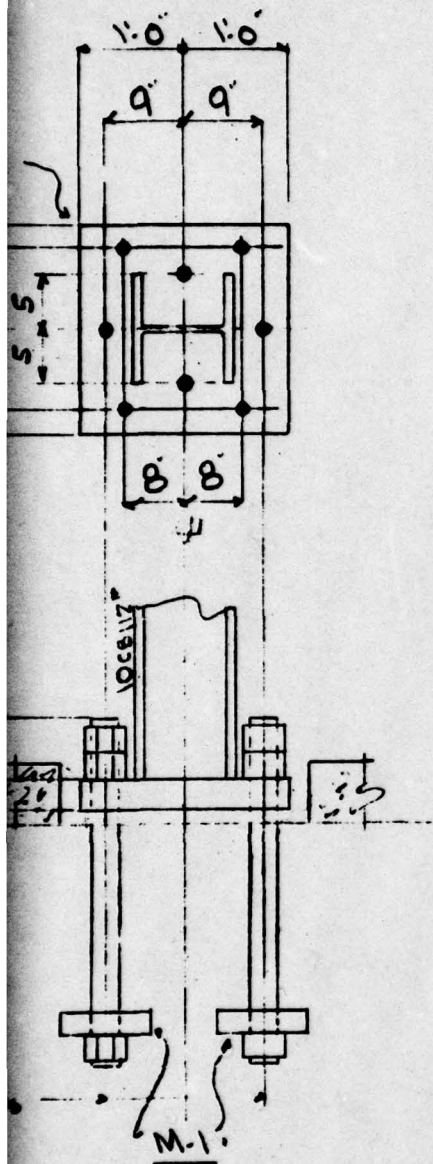
Base #. 24 x 3 1/2 x 2



ABI. 3" Bouts & 3" Hex N

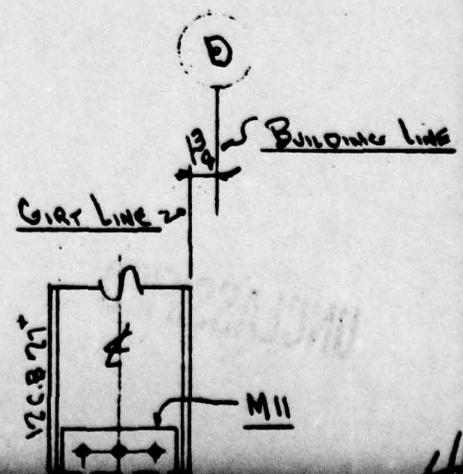
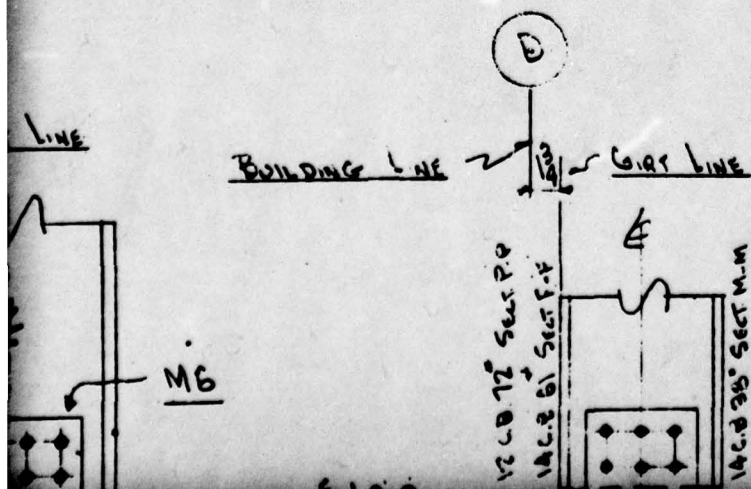






See Col. Lines D & A-15-16-5-6

The Footings Col. Lines B & C -15-16-5-6



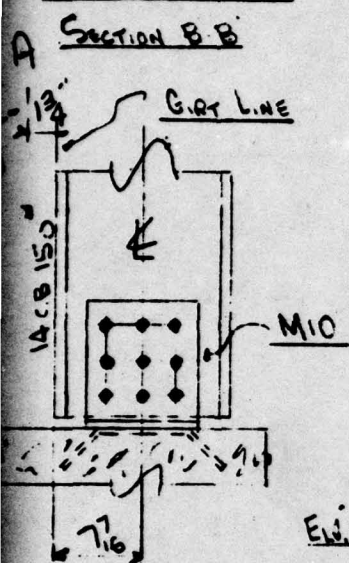








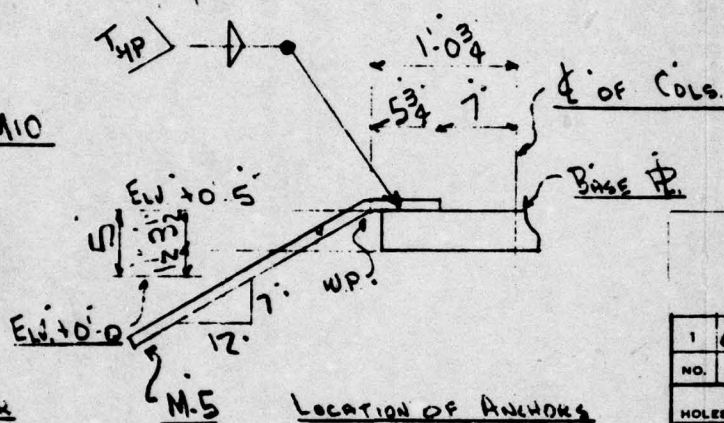
4' 1/2" 4' 2"  
 9' 6"  
 LOCATION OF ANCHOR  
 IN BUILDING No. 6



LOCATION OF ANCHOR  
 IN BUILDING No. 6 & 2  
 SECTION C-C

6' 6" SECT. F-F - M7  
 7' 6" SECT. M-M - M8  
 6' 6" SECT. P-P - M9  
 LOCATION OF ANCHOR  
 IN BUILDING No. 6 & 2

SECTION F-F  
 SECTION M-M  
 SECTION P-P



LOCATION OF ANCHORS  
 IN BUILDING No. 6 & 2  
 TYP. SECTION X-X

LOCATION OF ANCHOR  
 IN BUILDING No. 6 & 2  
 SECTION N-N

ANCHOR BOLTS FURNISHED BY C.W.S.C.  
 ANCHOR BOLTS SET BY OTHERS  
 BASE PLATES SET BY \_\_\_\_\_  
 GROUT FURNISHED BY OTHERS  
 GROUT POURED BY OTHERS  
 NOTE: ANCHOR BOLTS MUST BE SET ACCURATE  
 CENTERS AND ELEVATION AS SHOWN ON THIS DRAWING  
 CONSOLIDATED WESTERN STEEL CORPORATION NOT RESPONSIBLE FOR  
 ACCURACY OF ANCHOR BOLT SETTING WHEN SET BY OTHERS

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1	6-26-50 RDG	SECT. A	REVISION
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REF. CUST. DRAWING G-7-88			
OF 13			
DATE	DRAWN BY	CHECKED BY	
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HOLMES & NARVER BUILDINGS No. 6 & No. 2 ANCHOR BOLT SETTING PLAN			ORD.

6

7

ANCHOR  
No. 627  
N-N

BY C.W.S.C.  
OTHERS  
OTHERS  
OTHERS

MUST BE SET ACCURATELY TO LINE,  
AS SHOWN ON THIS DRAWING.  
CORPORATION NOT RESPONSIBLE FOR THE  
BOLT SETTING WHEN SET BY OTHERS.

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PAINT

CHECKED BY  
J. H. HARRIS

IN CHARGE OF  
HOLBROOK

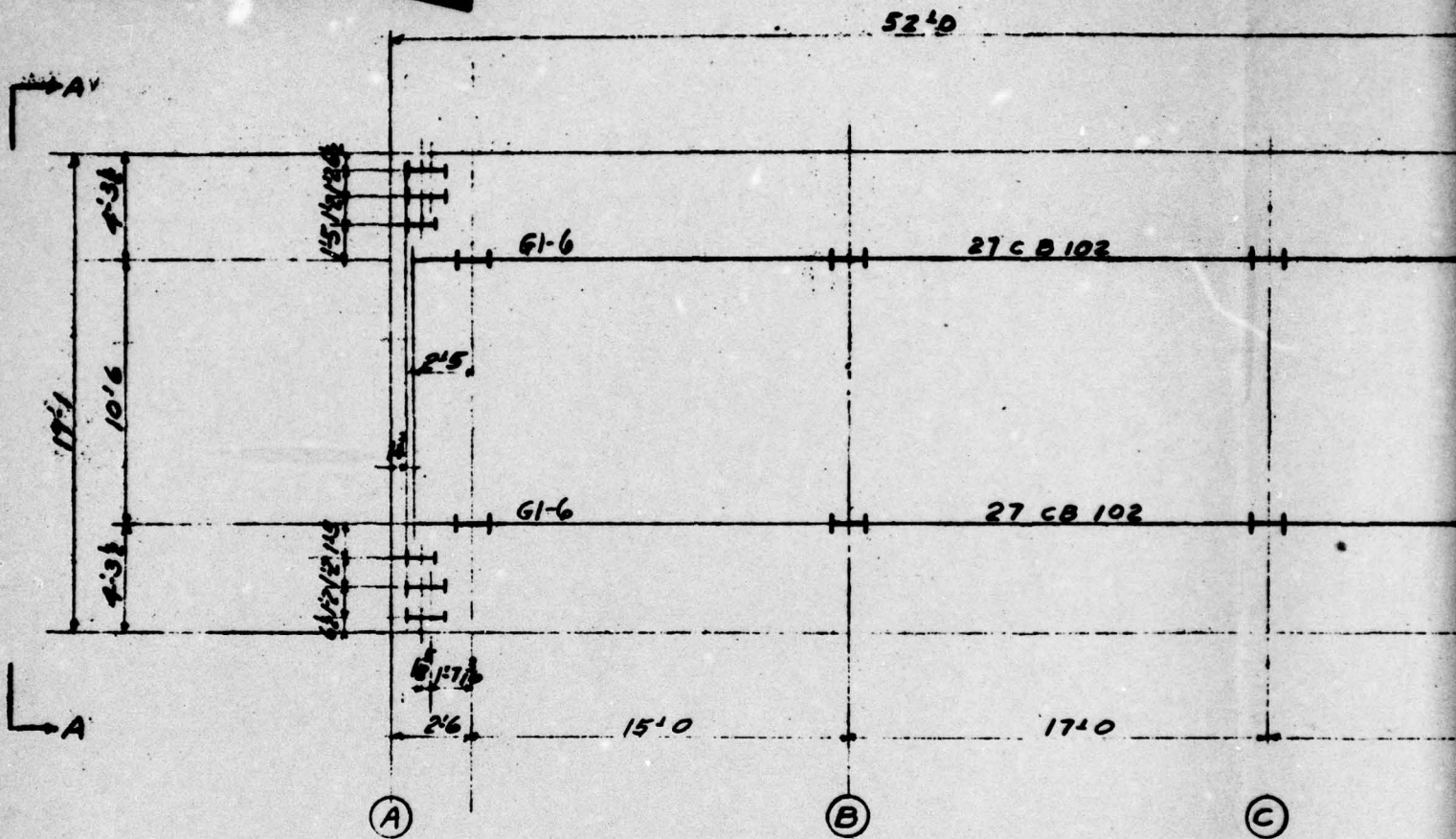
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CORPORATION  
S. CALIFORNIA  
STATES STEEL CORPORATION

ORDER NO. 48357	DRAWING NO. E-1
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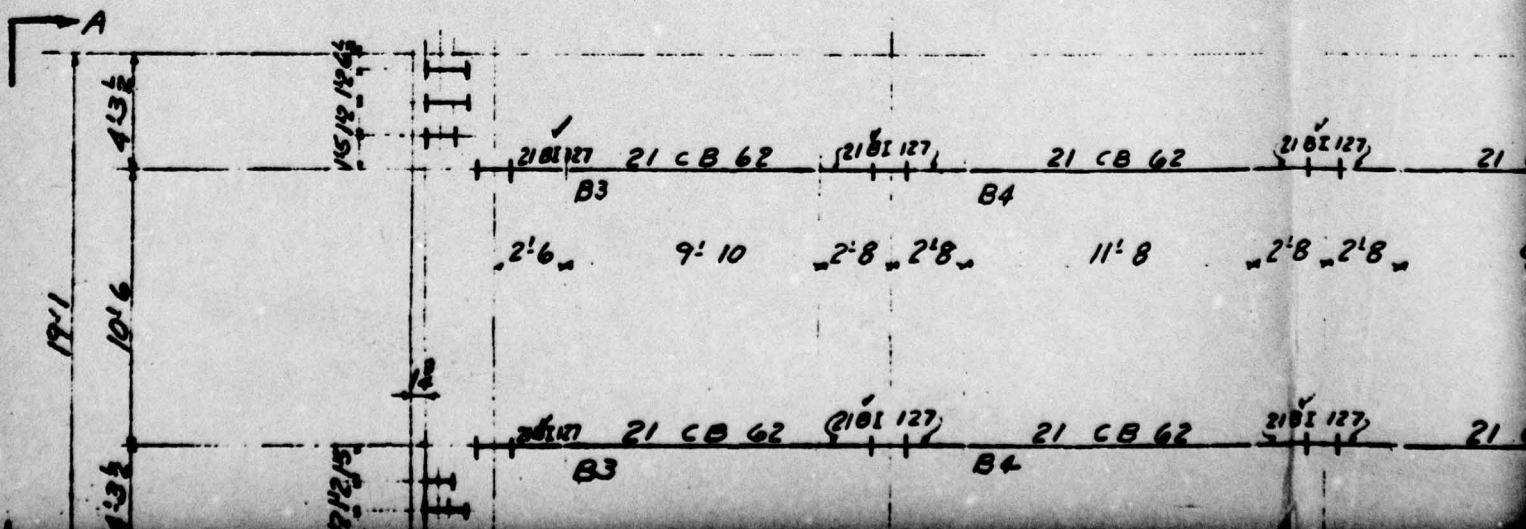
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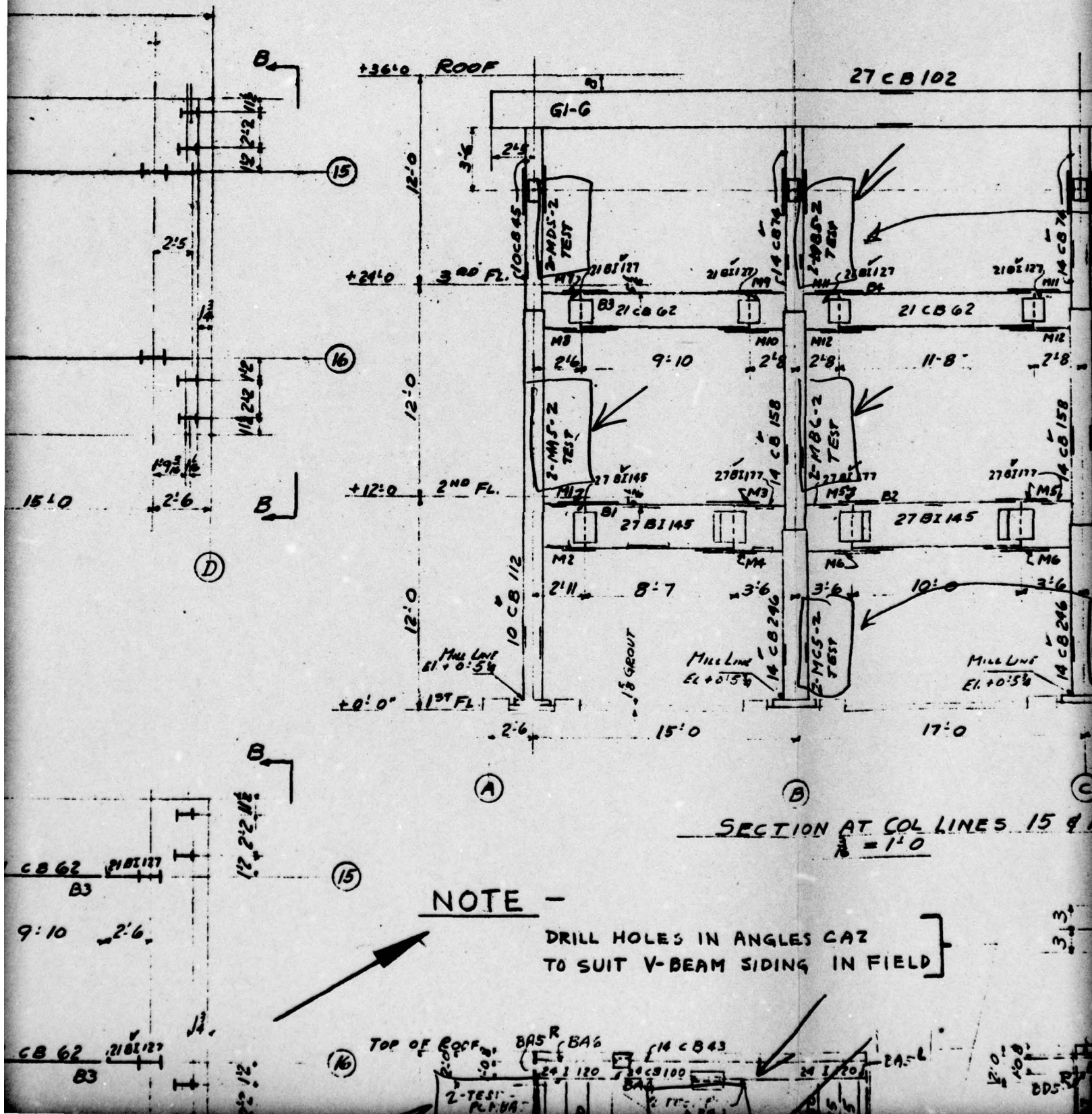


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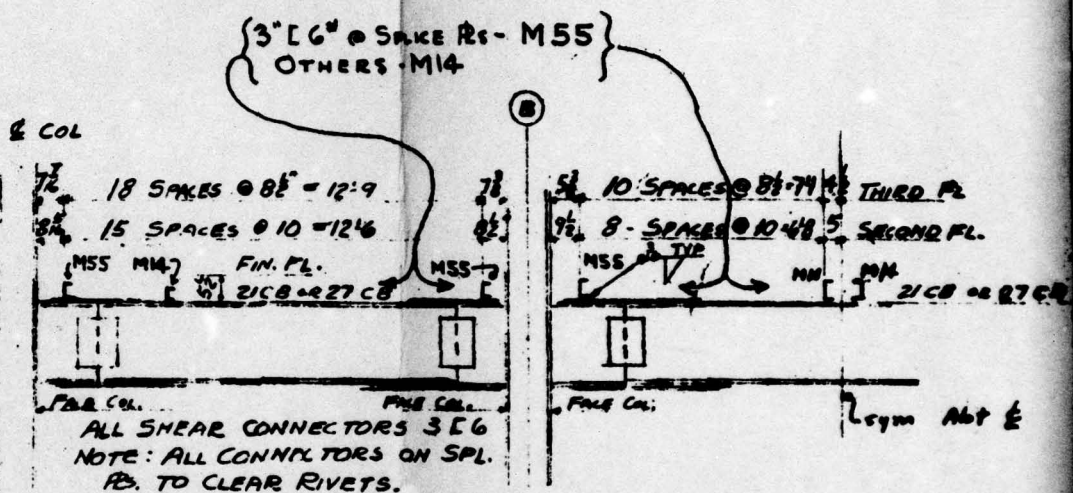
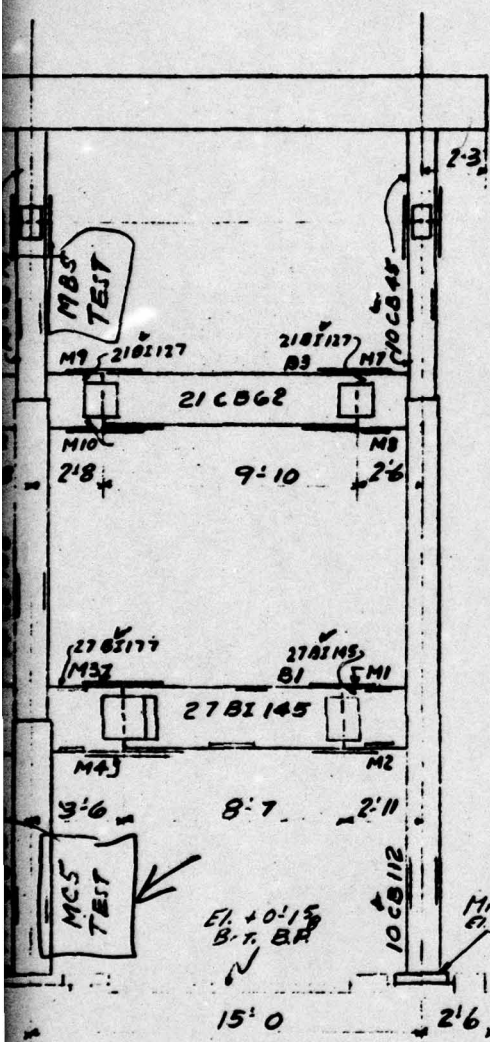


ROOF PLAN (ELEV. 35'4")  
(1" = 1'0")

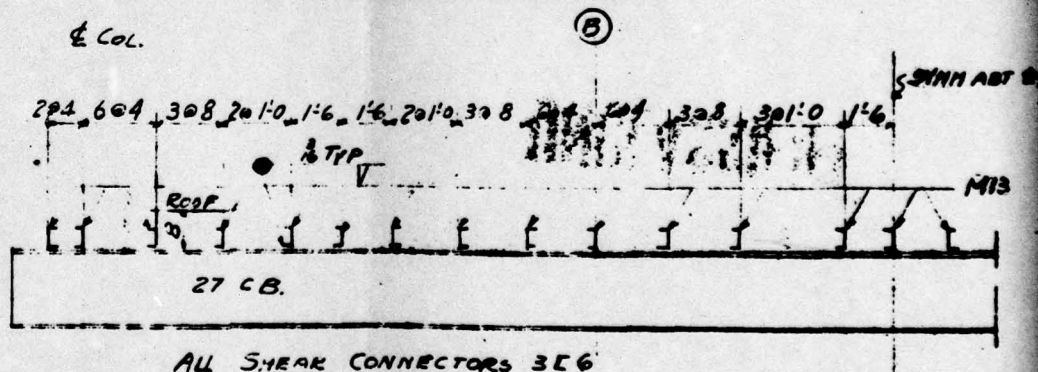




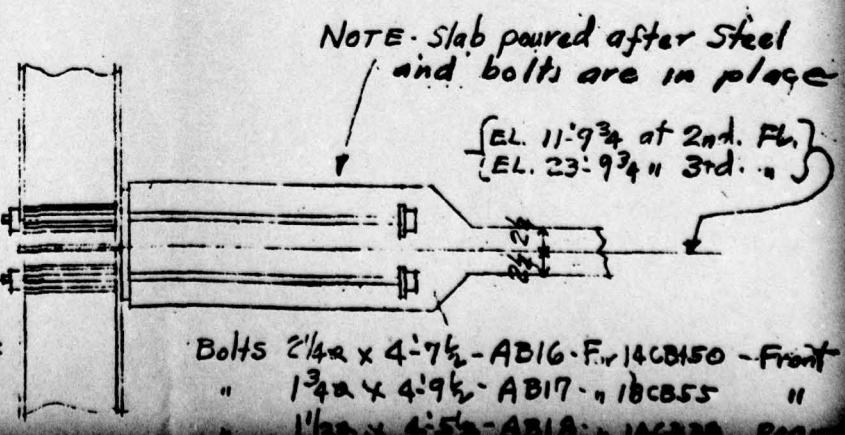
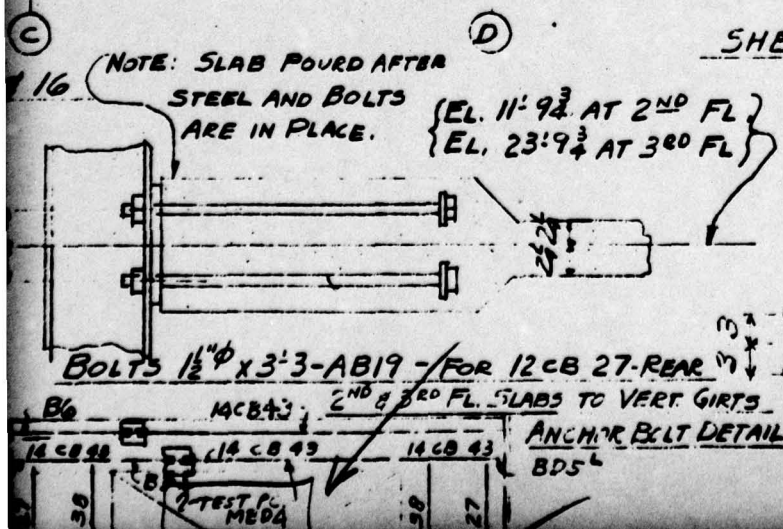


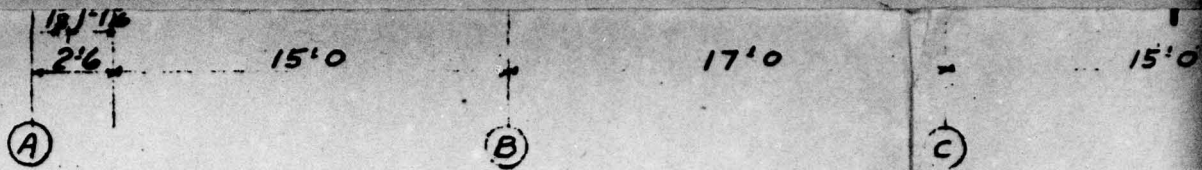


SHEAR CONNECTOR DETAIL  
AT 2<sup>ND</sup> & 3<sup>RD</sup> FLOORS

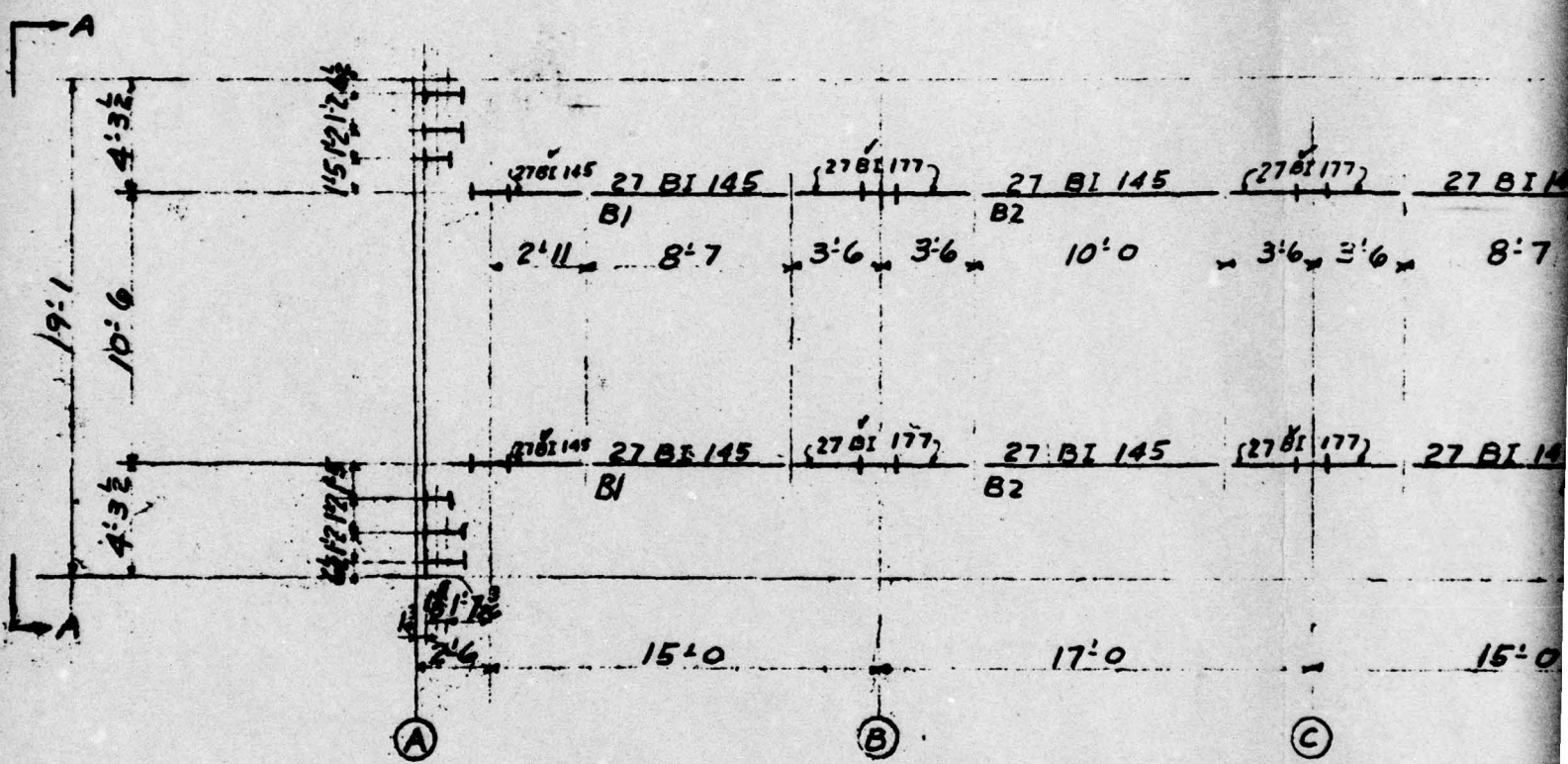


SHEAR CONNECTOR DETAIL AT ROOF





3<sup>RD</sup> FLOOR PLAN (ELEV. 23'-6 1/2")  
(1/4" = 1'-0")



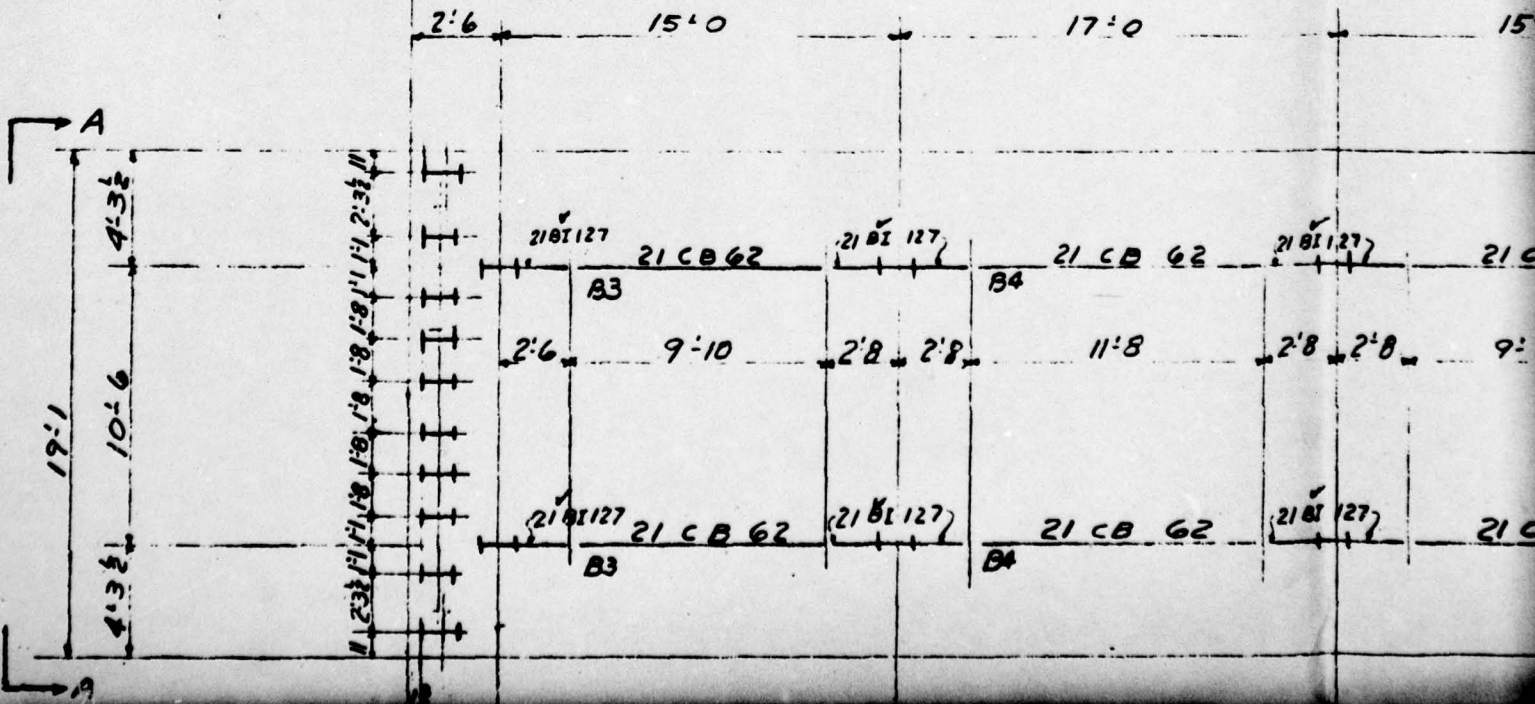
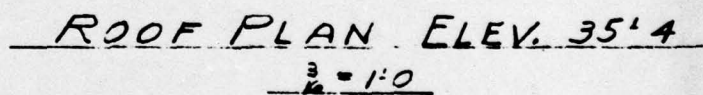
2<sup>ND</sup> FLOOR PLAN (ELEV. 11'-6 1/2")  
1/4" = 1'-0"



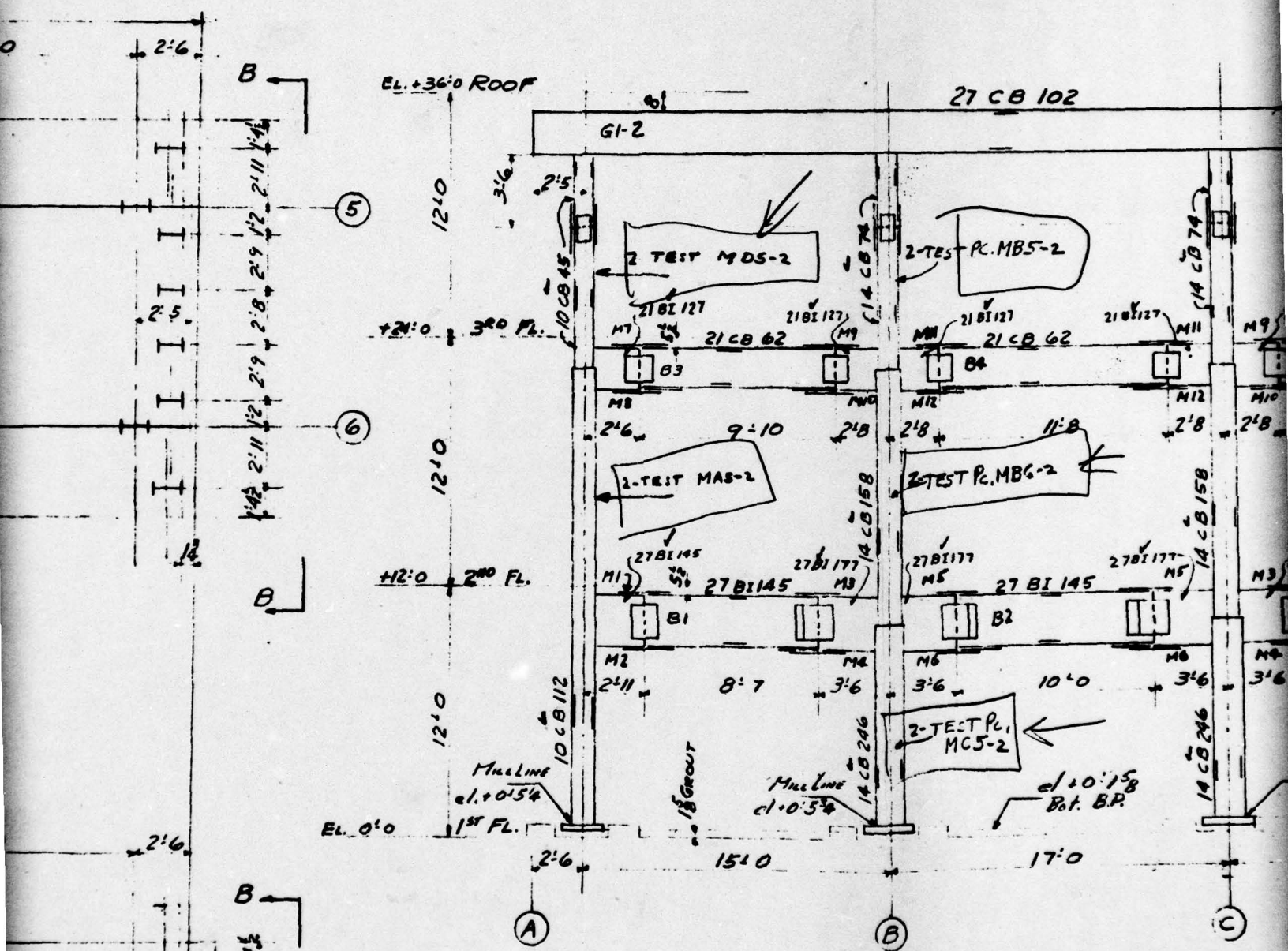




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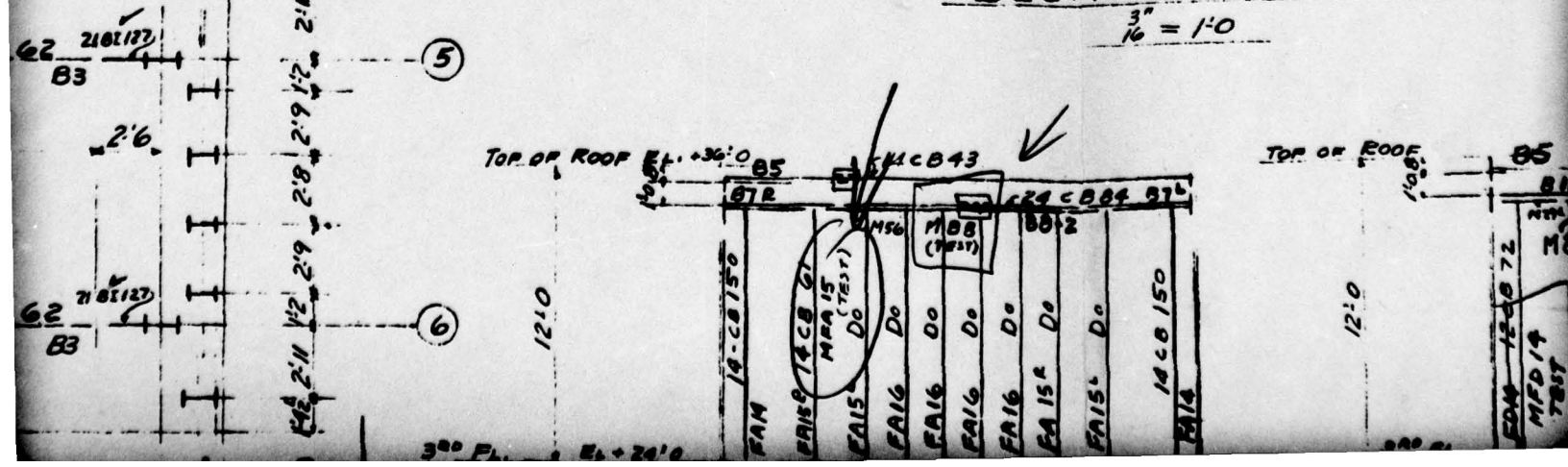


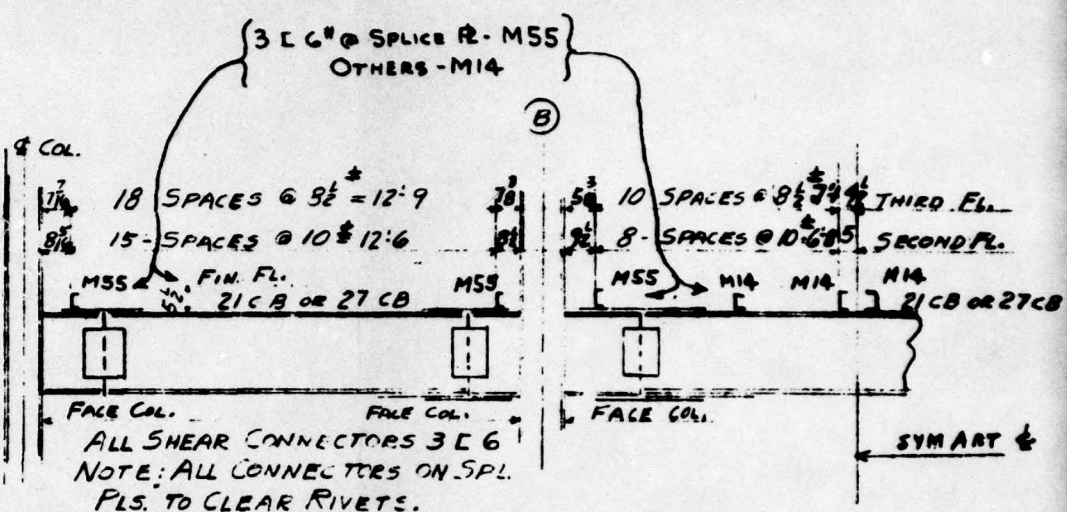
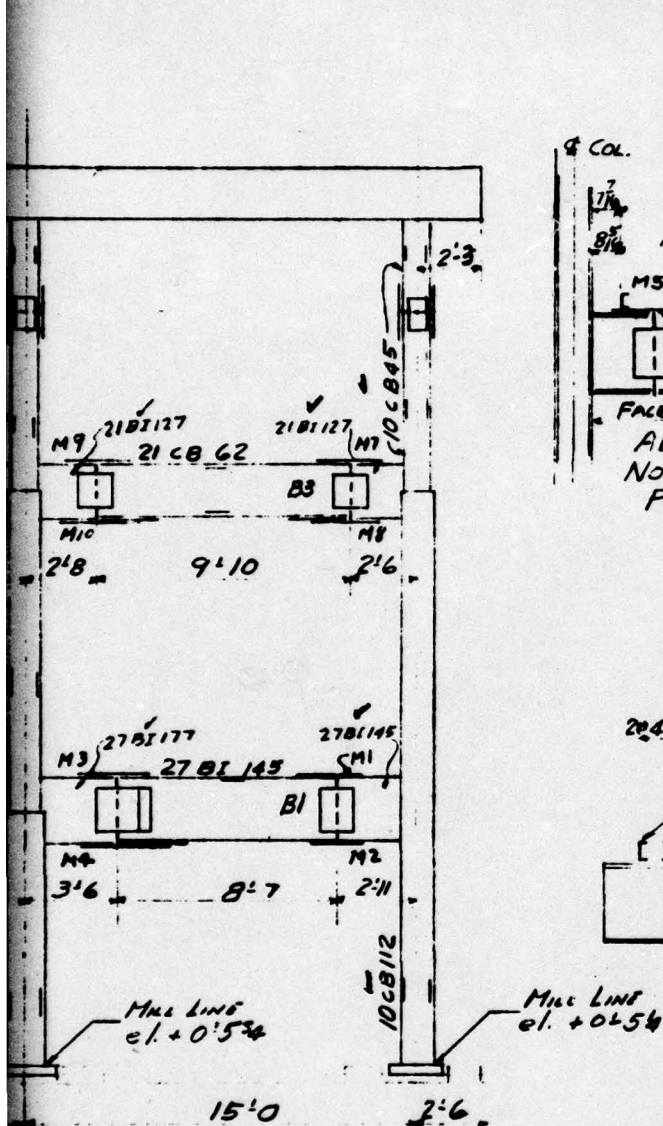




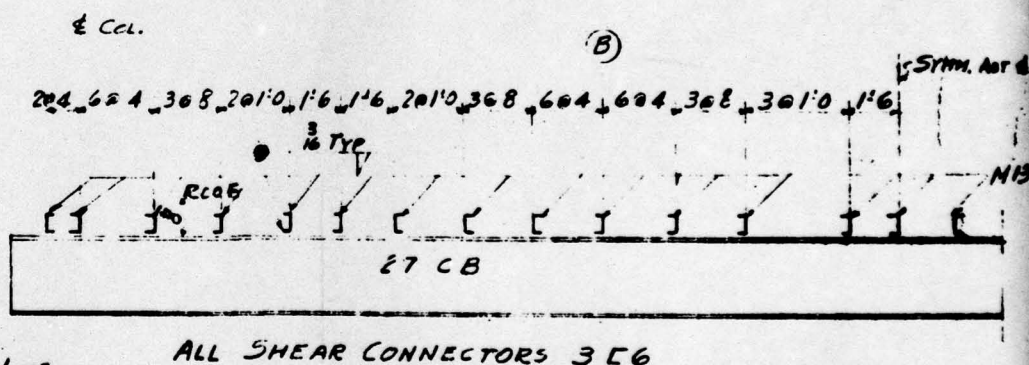
SECTION AT COL. LINES 5 & 6.

$\frac{3}{16} = 1'-0"$



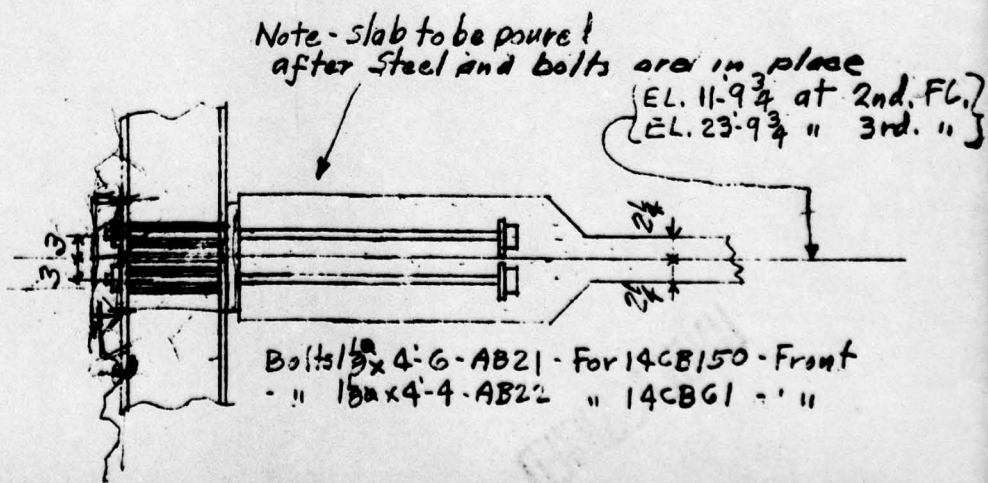


SHEAR CONNECTOR DETAIL.  
AT 2<sup>ND</sup> & 3<sup>RD</sup> FLOORS.

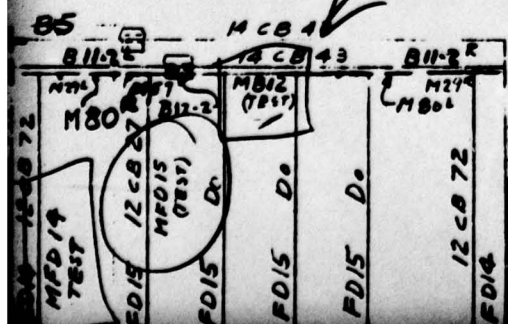


ALL SHEAR CONNECTORS 356

SHEAR CONNECTOR DETAIL AT ROOF.

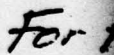


Anchor Bolt Detail  
2nd. & 3rd. Fl. Slabs to Vertical Girts









**FIG. A2.48**

MF012  
(78517)

FD11 12 C B 27	FD13 12 C B 27	FD13 D0	FD13 D0	FD13 D0	FD12 12 C B 72
2'11 1/2	2'9	2'8	2'9 1/2	2'11 1/4	4'3 1/2
3 1/2	10'6				

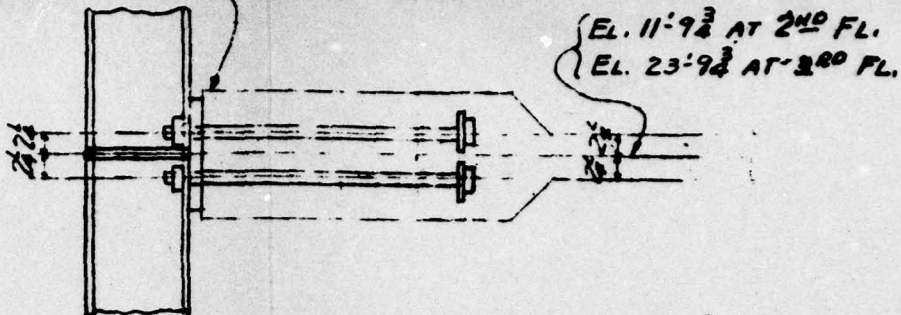
⑥

REAR ELEV. B-B  
1/2" = 1'-0"

⑤

For Field Conn's See Sh. E2

NOTE-SLAB TO BE POURED  
AFTER STEEL AND BOLTS  
ARE IN PLACE.

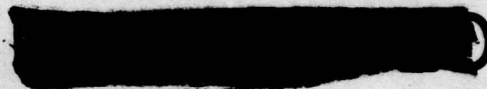


BOLTS 3/4"  $\phi$  x 3'-3" - AB23 - FOR 12CB72 & 12CB 27 - (REAR)

ANCHOR BOLT DETAIL

2ND & 3RD FL. SLABS TO VERTICAL GIRTS

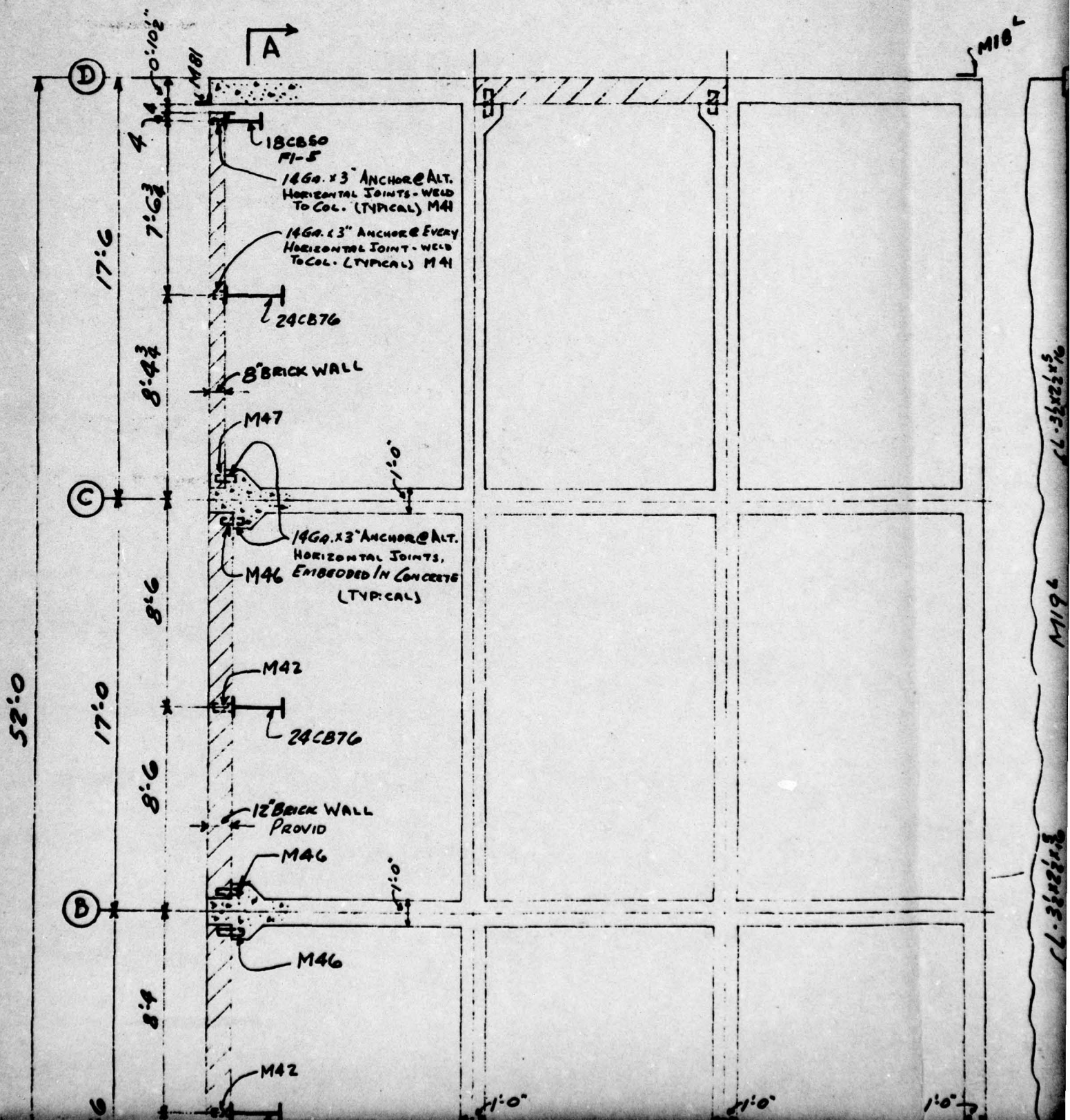
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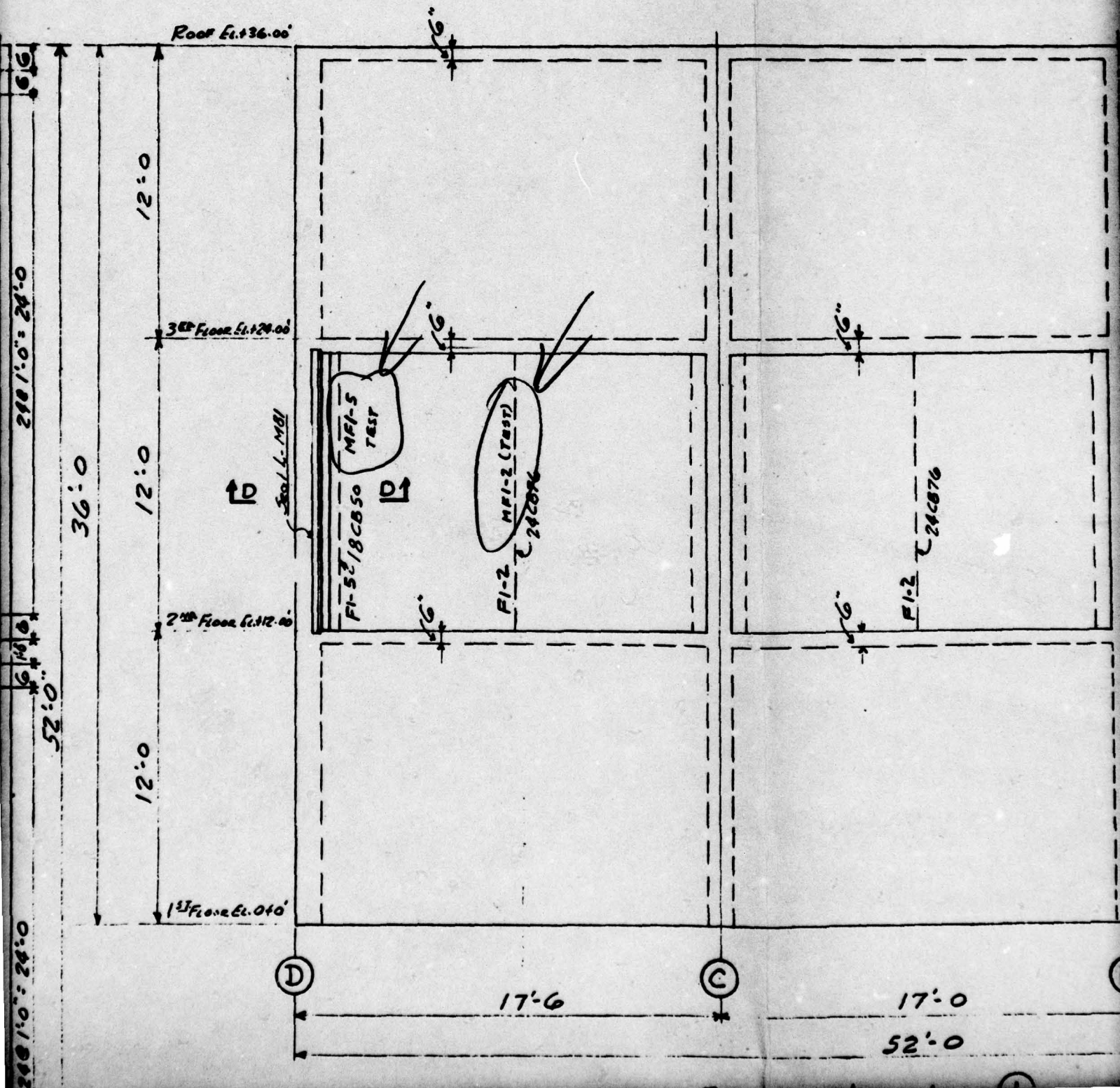


1			
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RIVETS			
REP.			
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HOLMES & NARVER BUILDING NO. 2			ORDER NO. 48357
ERECTION DIAGRAM			CHANGED NO. E3

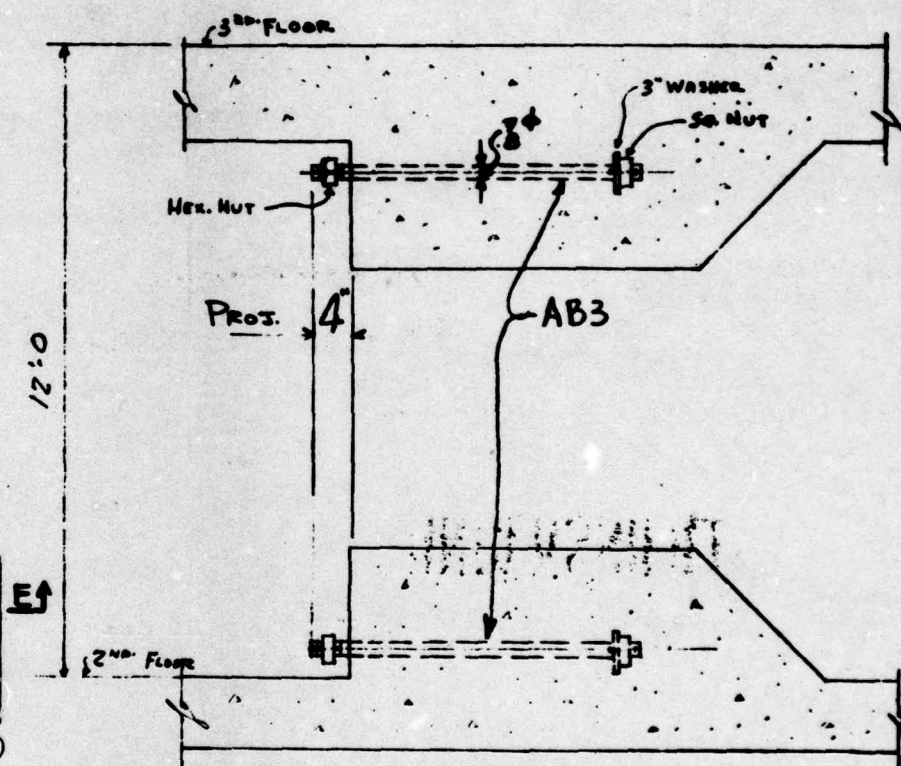
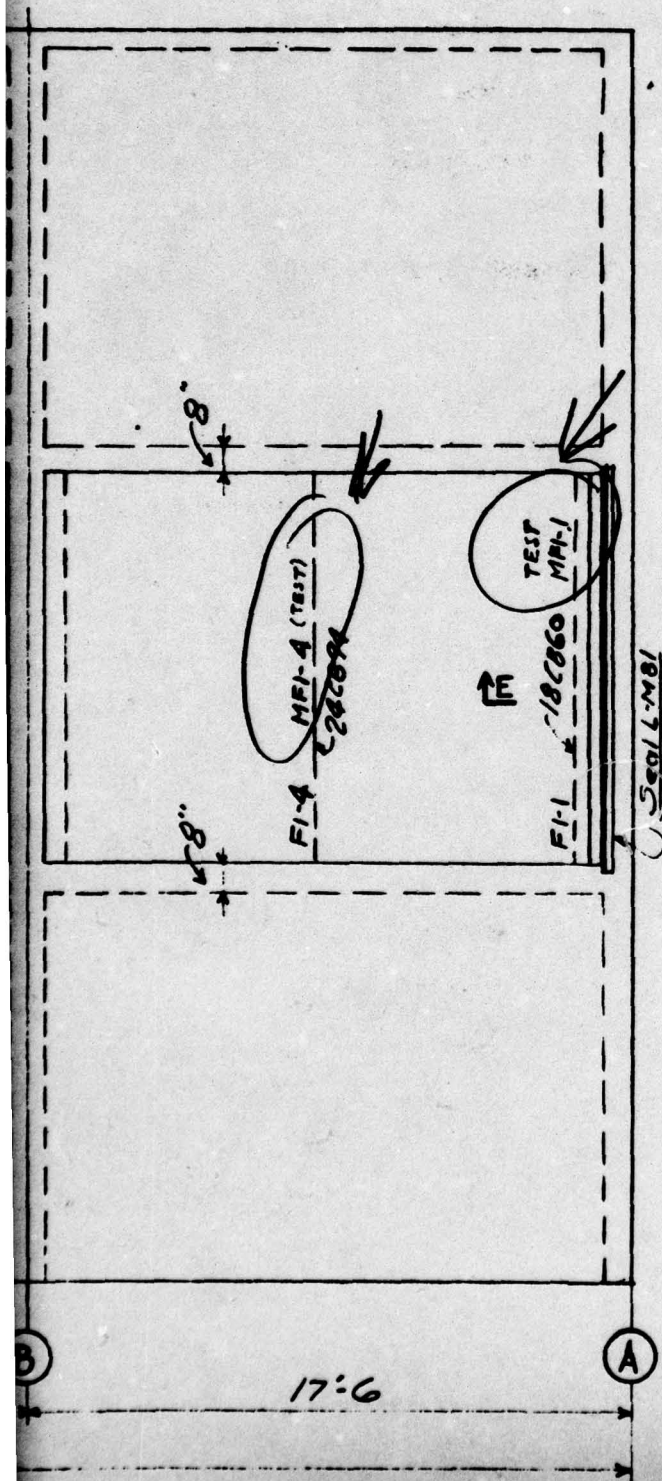


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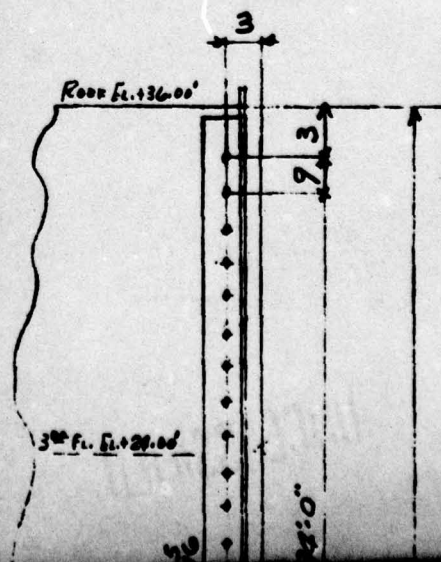




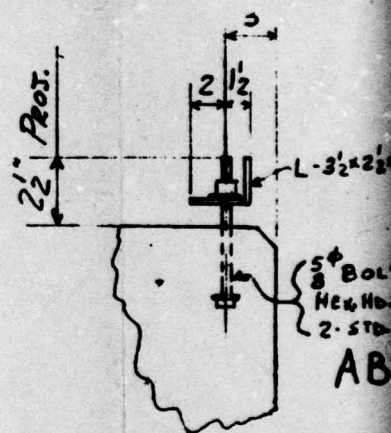
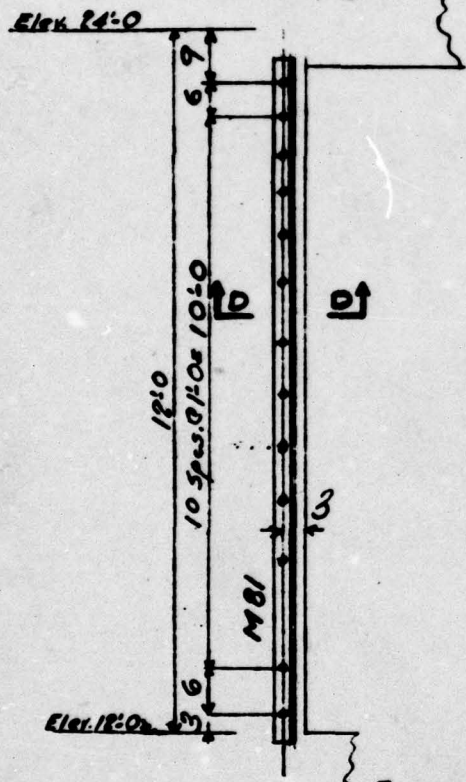
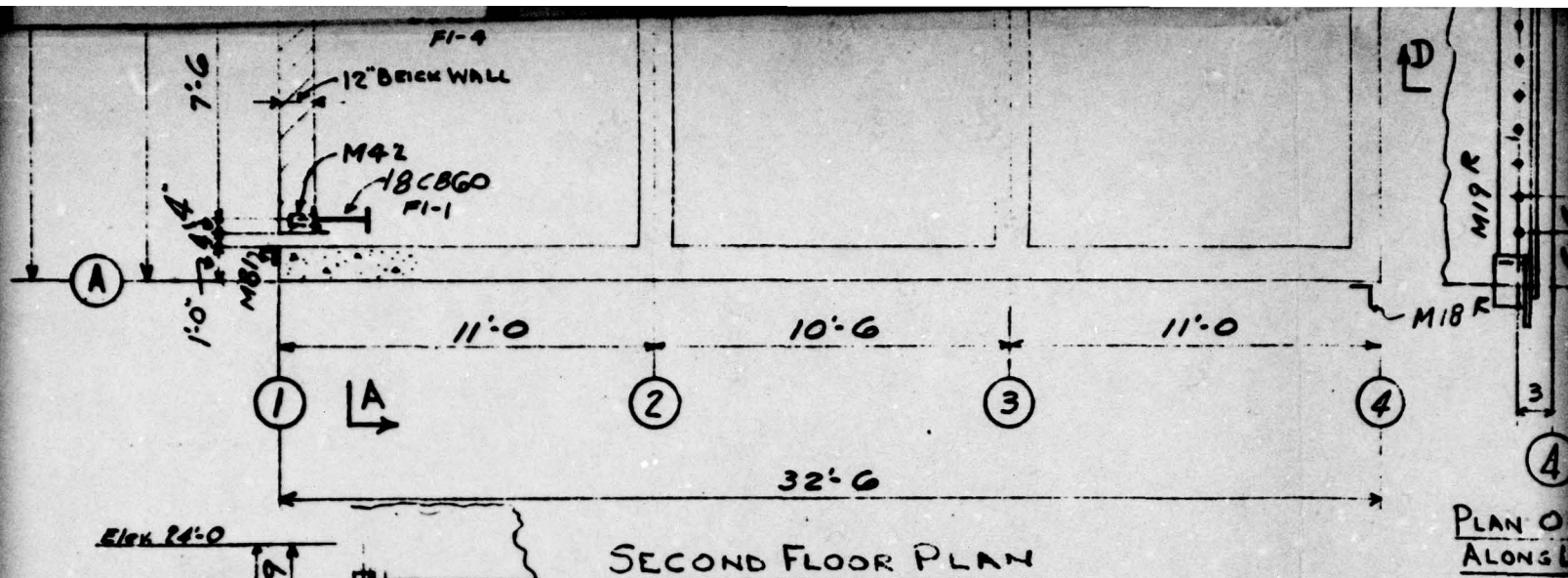




SECTION - BB

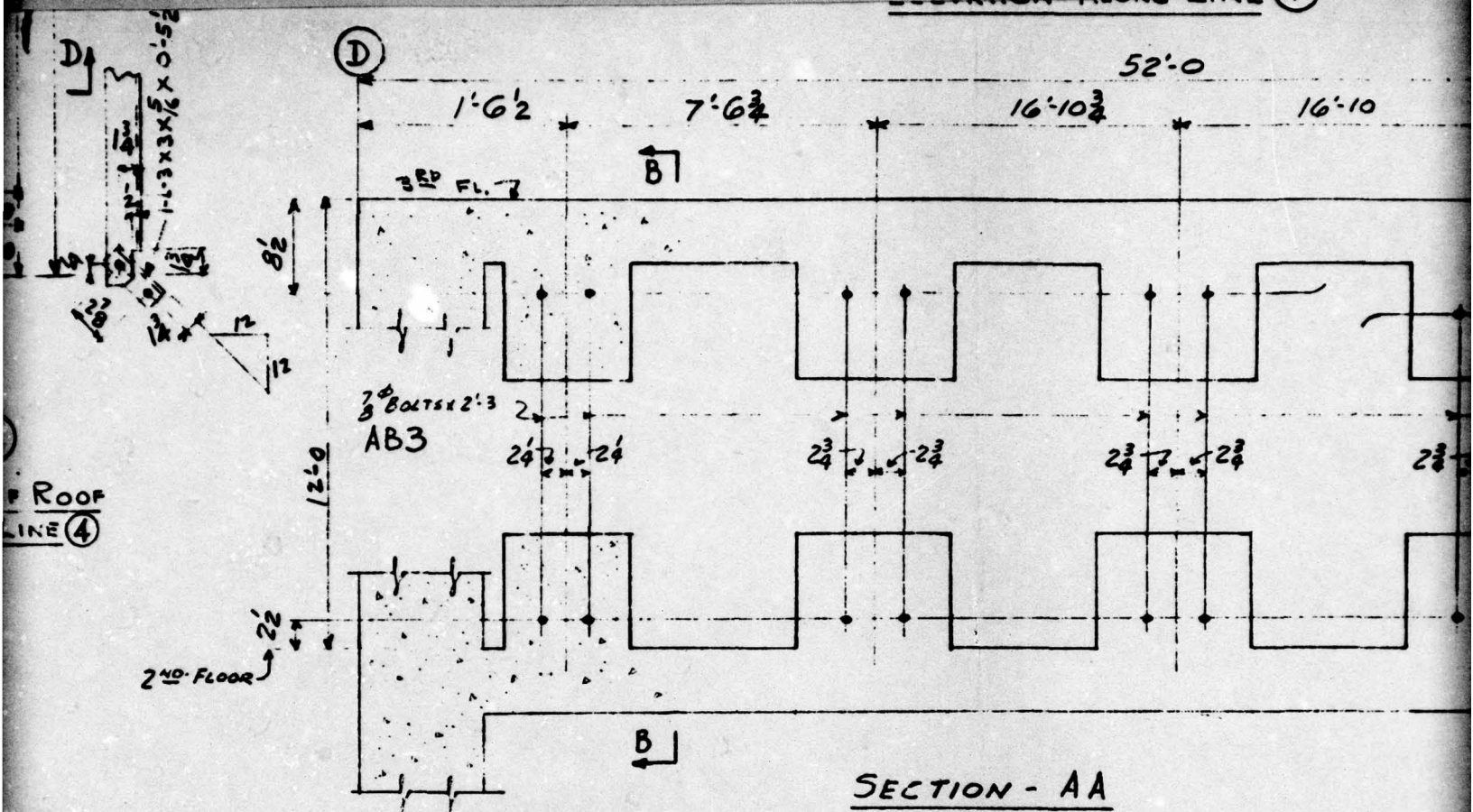






ELEVATION OF DI - (SHOWN)  
ELEVATION OF AI - (OPP).

SECTION DD  
(TYPICAL)  
SECTION EE

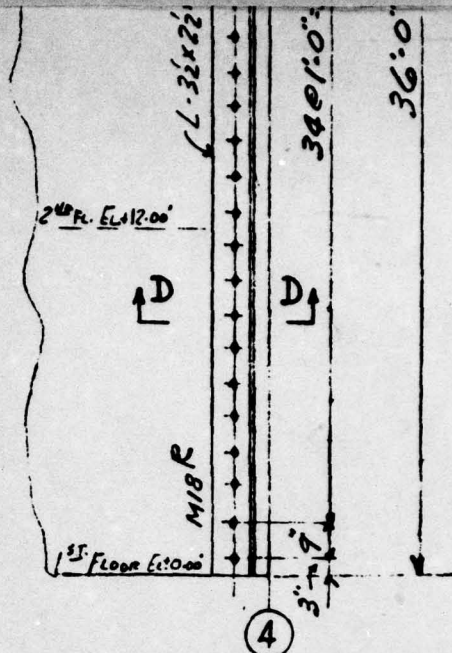
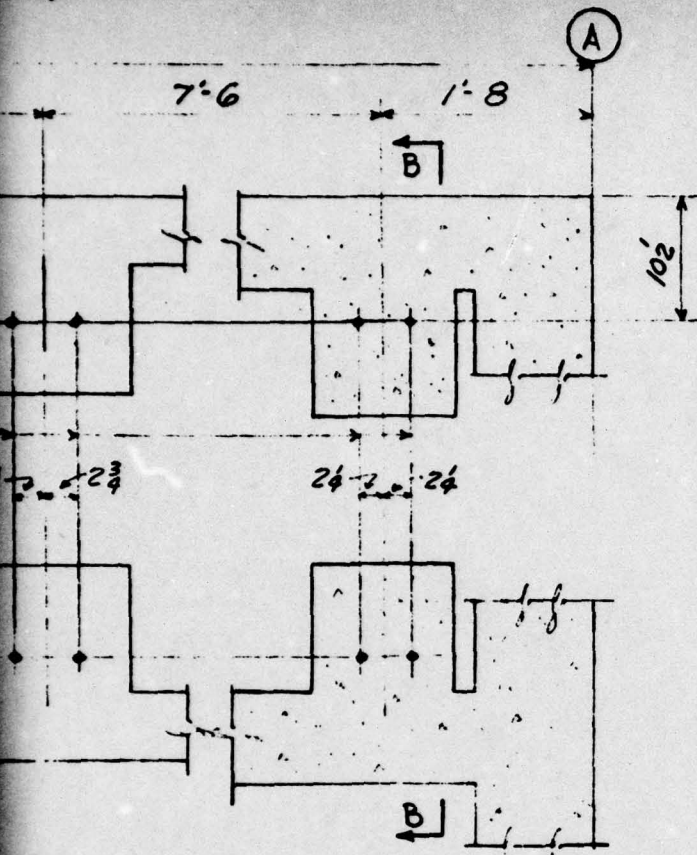


SECTION - AA

FIG. A2.49

ANCHOR BOLTS FURNISHED BY	<u>C.W.S.C.</u>
ANCHOR BOLTS SET BY	<u>OTHERS</u>
BASE PLATES SET BY	<u>NONE</u>
GROUT FURNISHED BY	<u>OTHERS</u>
GROUT POURED BY	<u>OTHERS</u>
NOTE: ANCHOR BOLTS MUST BE SET ACCURATELY TO LINE, CENTERS AND ELEVATION AS SHOWN ON THIS DRAWING.	
CONSOLIDATED WESTERN STEEL CORPORATION NOT RESPONSIBLE FOR THE ACCURACY OF ANCHOR BOLT SETTING WHEN SET BY OTHERS.	





ELEVATION AT A4 - SHOWN  
ELEVATION AT D4 - OPP.

~~REDACTED~~  
**UNCLASSIFIED**

NO.	DATE	BY	REVISION
HOLES	PAINT		
RIVETS			
REF.			
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF
4-26-50	GOLDIE	GALLAGHER	HOLBROOK
<b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION			
HOLMES & NARVER BUILDING NO. 1			ORDER NO. 48337
ERECTION & ANCHOR BOLT PLAN			DRAWING NO. 1E4

ERECTION BY \_\_\_\_\_

FIELD CONN'S See Sh. E2

FIELD PAINT \_\_\_\_\_

INSPECTION BY \_\_\_\_\_

BLDG. PERMIT No. \_\_\_\_\_

6

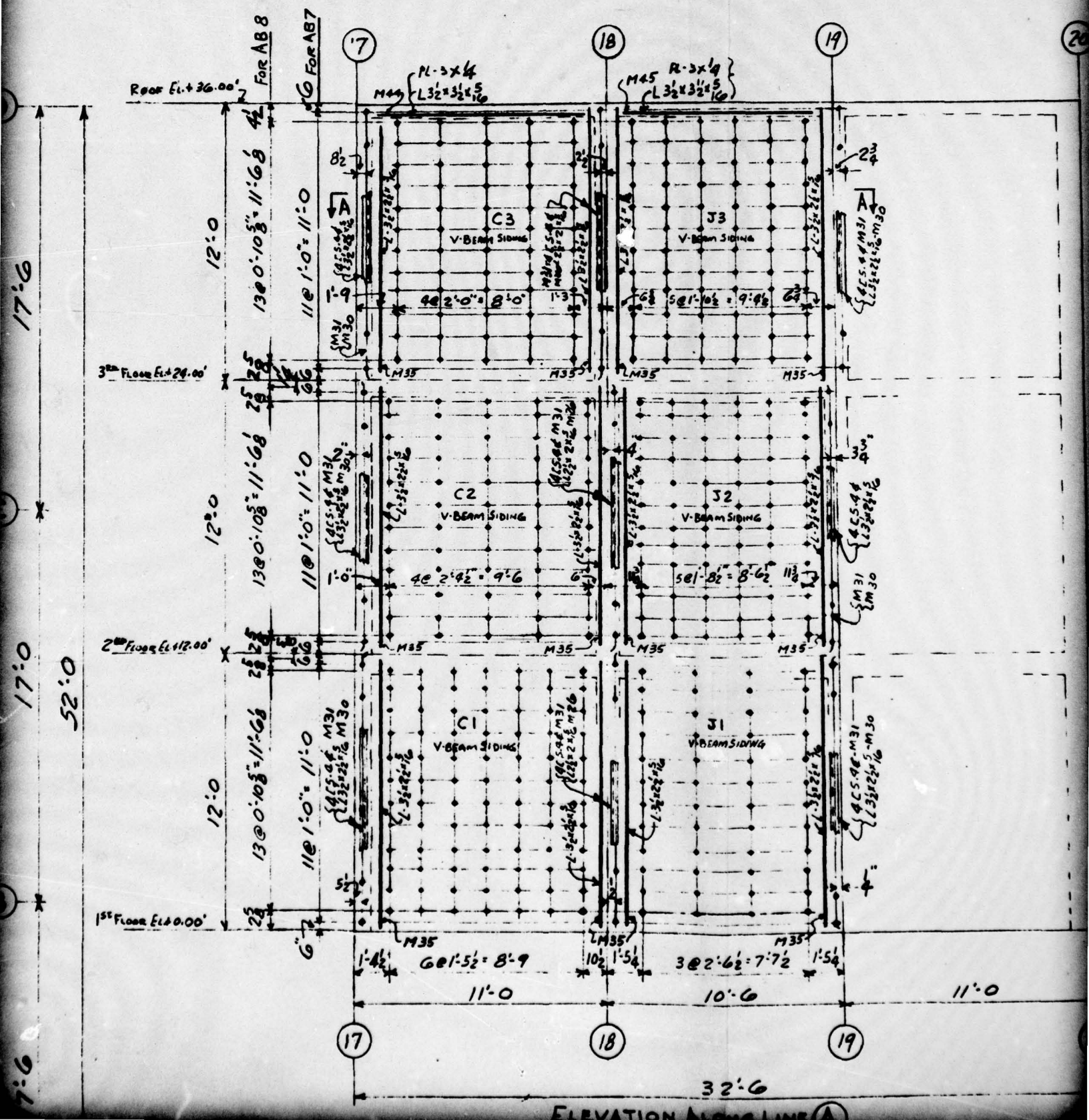
BYCE 80



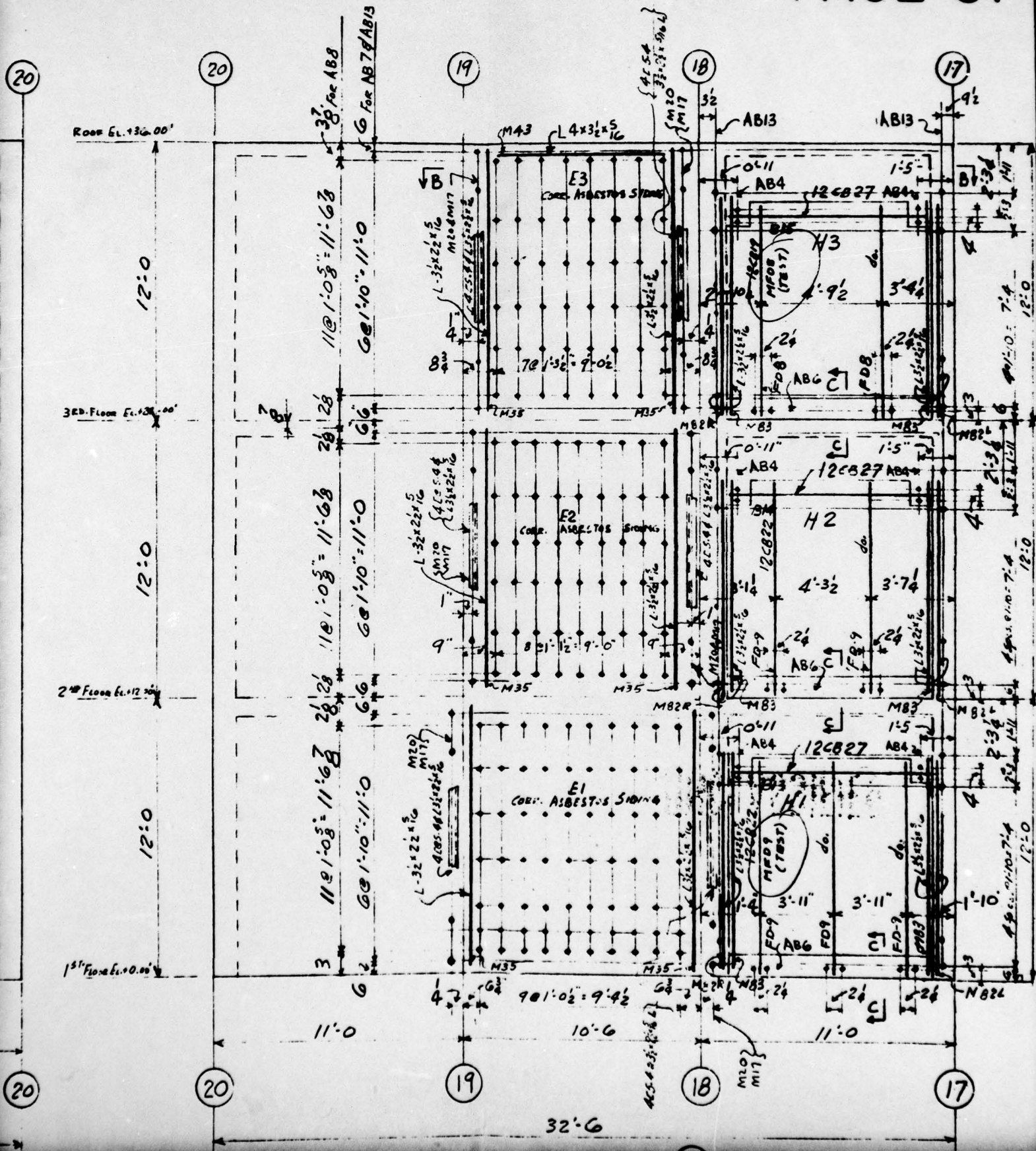
UNCLASSIFIED

[REDACTED]

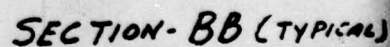
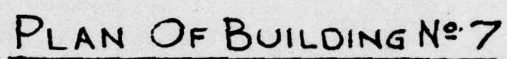
<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>

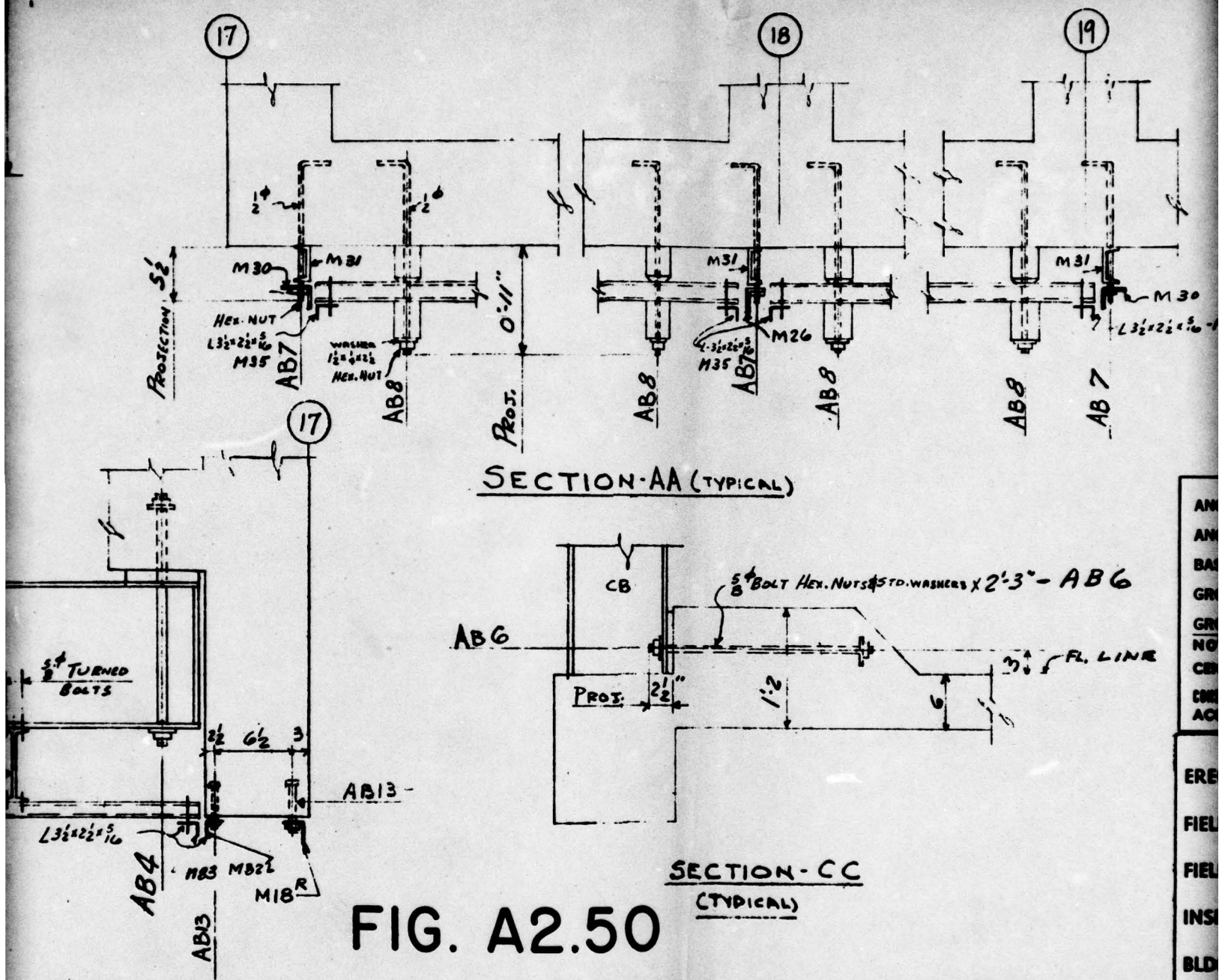












HOLES FOR CONNECTING V BEAMS  
TO VERTICAL GIRTS TO BE DRILLED  
IN FIELD

WORK THIS DRAWING  
**UNCLASSIFIED**

ANCHOR BOLTS FURNISHED BY C.W.S.C.  
ANCHOR BOLTS SET BY OTHERS  
BASE PLATES SET BY NONE  
GROUT FURNISHED BY OTHERS  
GROUT POURED BY OTHERS  
NOTE: ANCHOR BOLTS MUST BE SET ACCURATELY TO LINE,  
CENTERS AND ELEVATION AS SHOWN ON THIS DRAWING.  
CONSOLIDATED WESTERN STEEL CORPORATION NOT RESPONSIBLE FOR THE  
ACCURACY OF ANCHOR BOLT SETTING WHEN SET BY OTHERS.

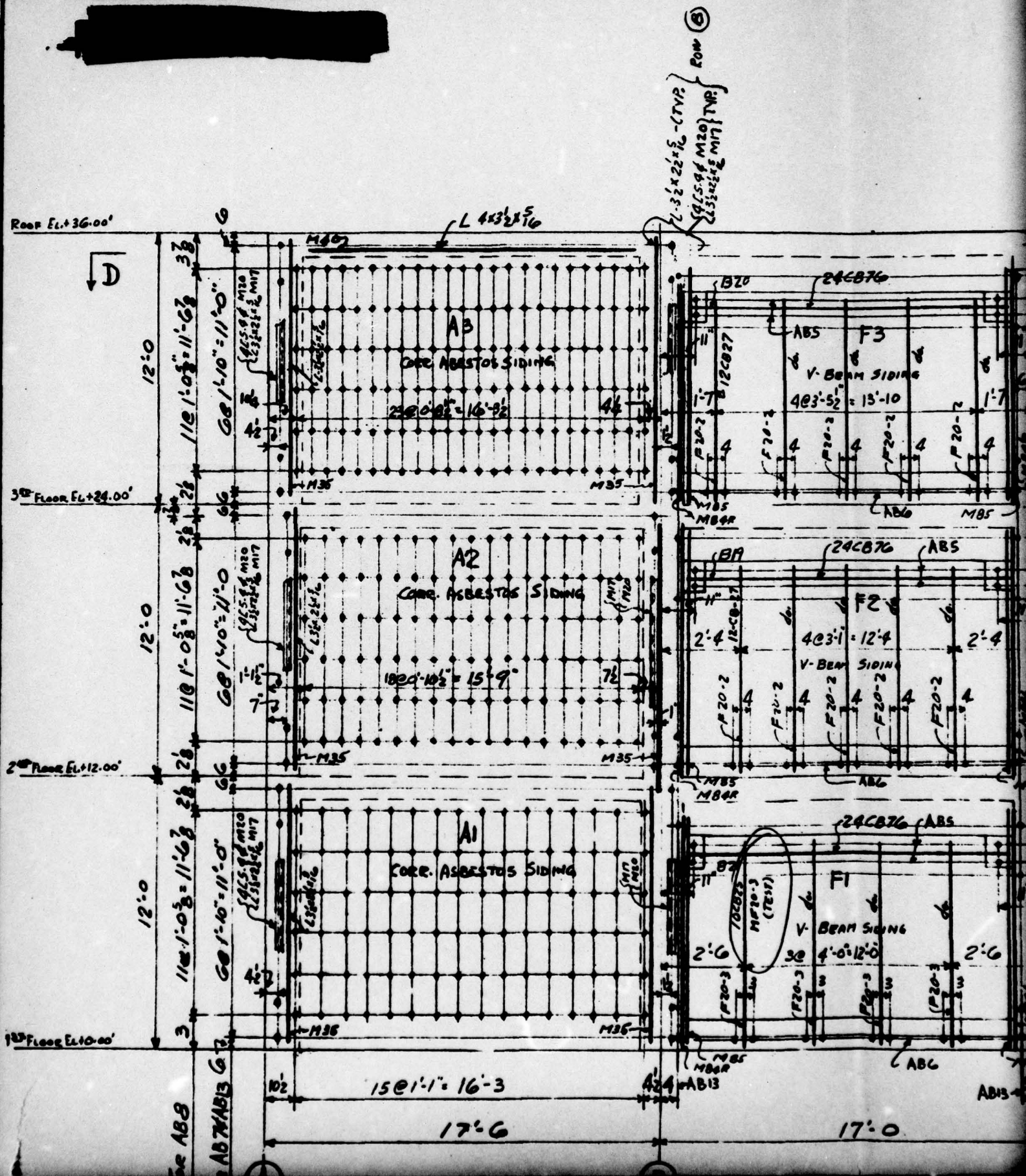
ERECTION BY \_\_\_\_\_  
FIELD CONN'S See Sh. E2  
FIELD PAINT \_\_\_\_\_  
INSPECTION BY \_\_\_\_\_  
BLDG. PERMIT No. \_\_\_\_\_

1				
NO.	DATE	BY	REVISION	
HOLES			PAINT	
RIVETS				
REF.				
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF	
5-1-50	GOLDIE	GALLAGHER	Holbrook	
CONSOLIDATED WESTERN STEEL CORPORATION LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION				
HOLMES & NARVER BUILDING NO. 7			ORDER NO. 42357	
ERECTION & ANCHOR BOLT PLAN			DRAWING NO. E5	

6

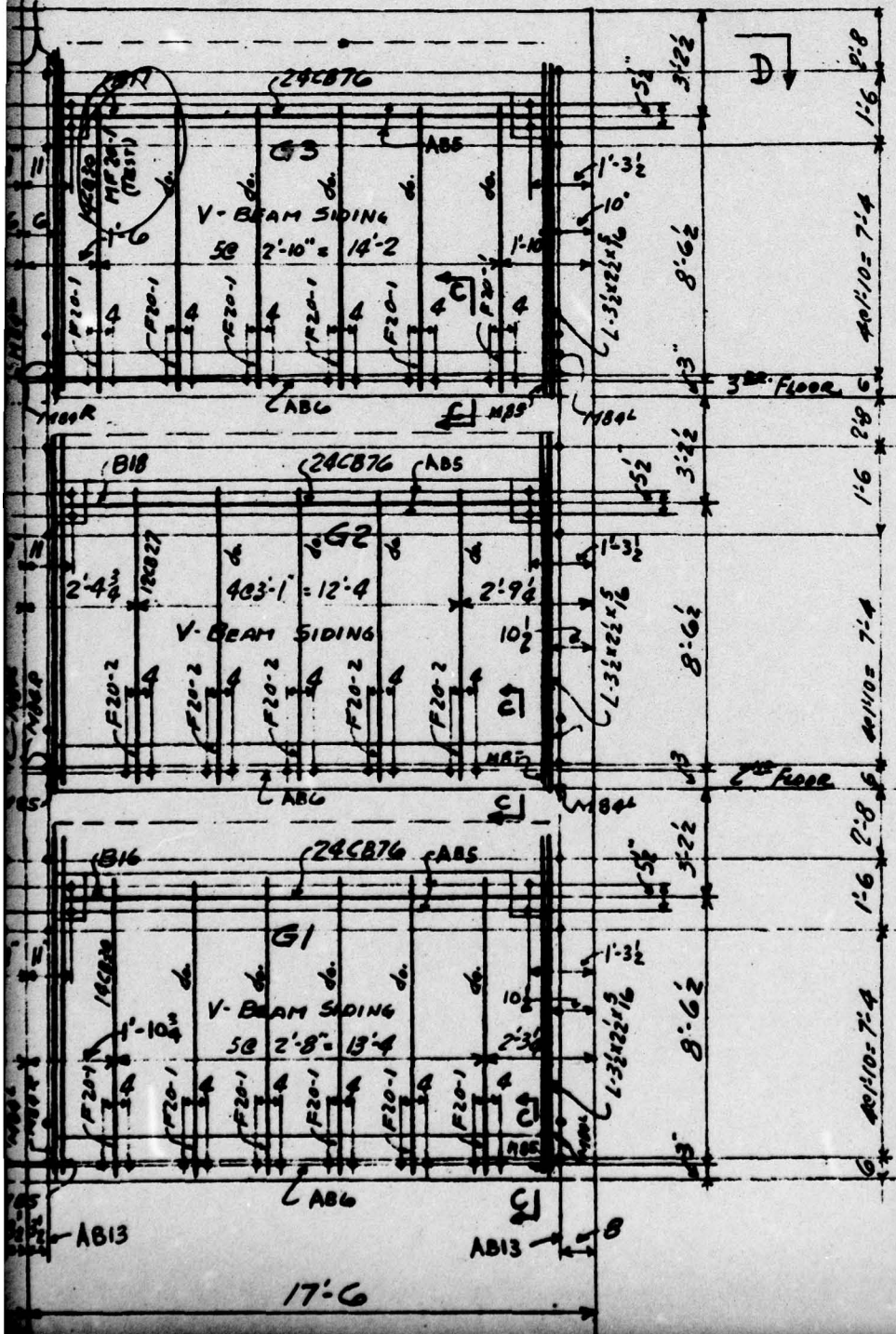


[REDACTED]



Rev C

L-3 1/2 x 2 1/2 x 5 (TYP)





3

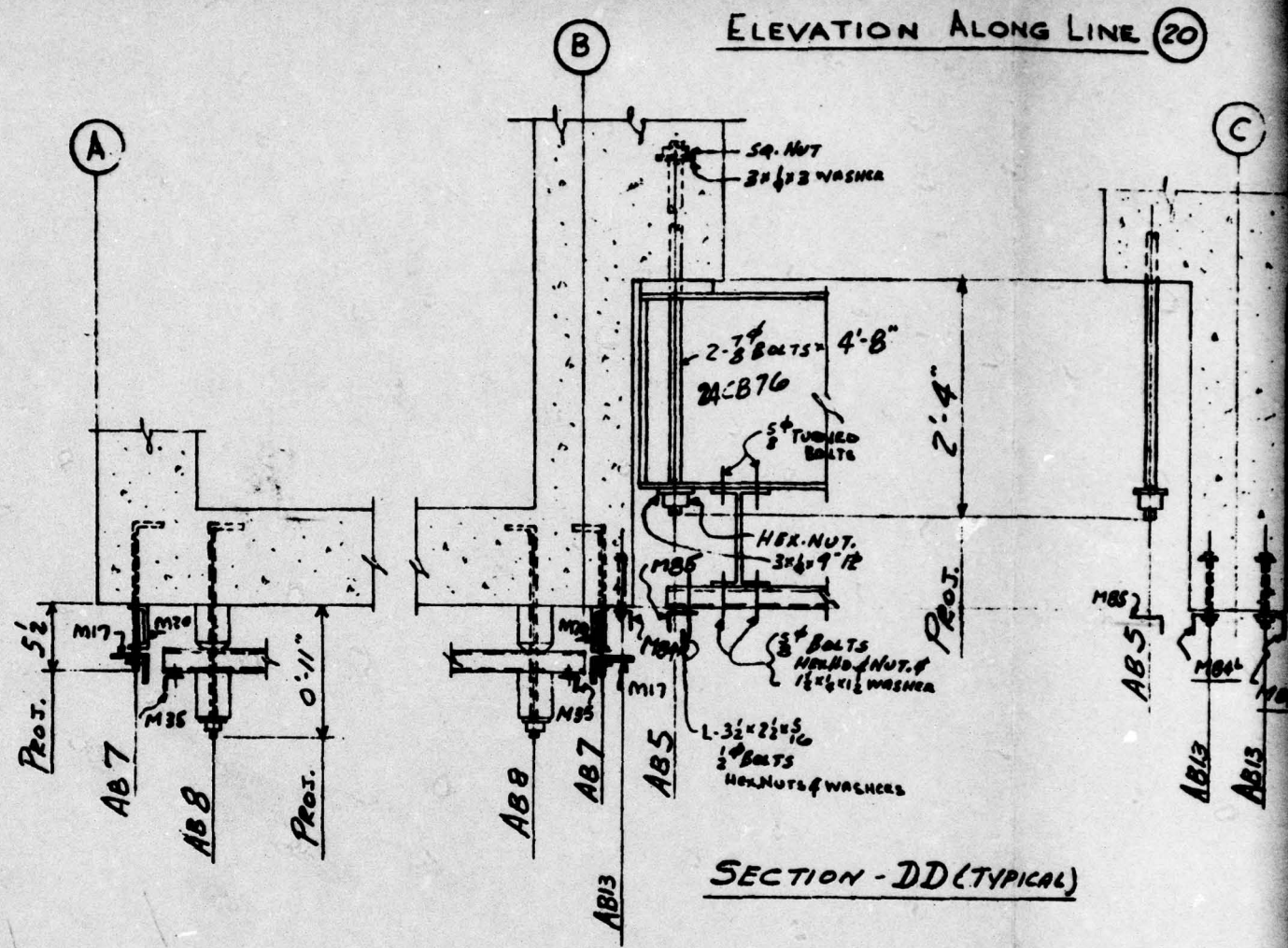
PAGE 82

20082410



52'-0

ELEVATION ALONG LINE (20)



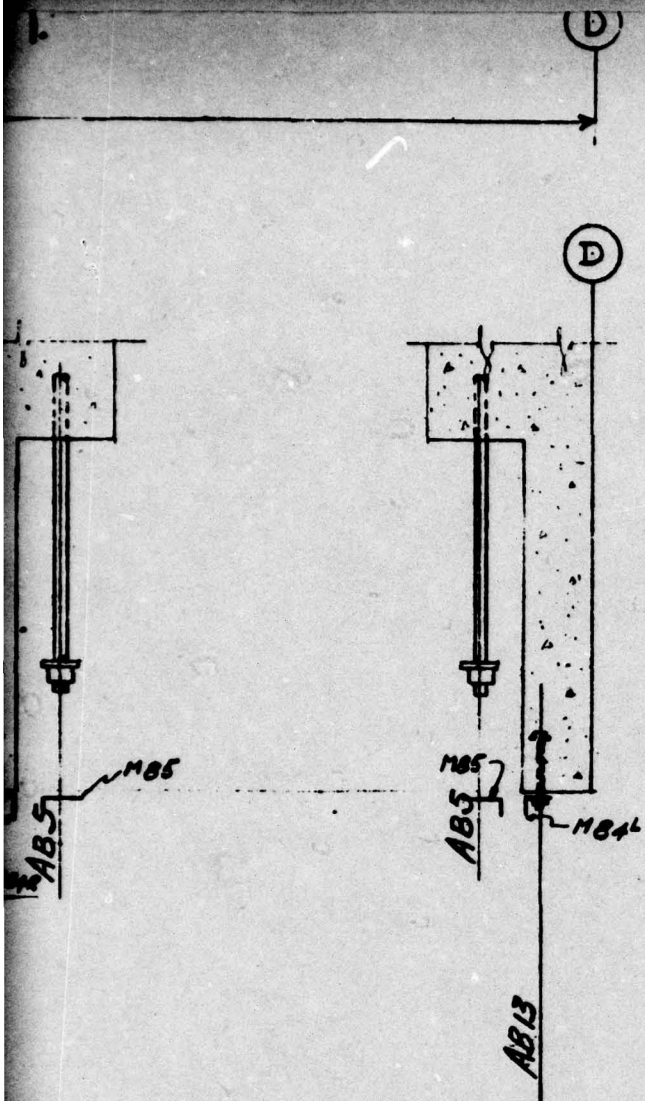
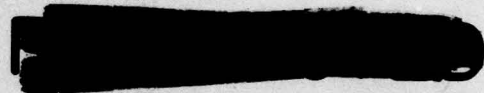


FIG. A2.51



**UNCLASSIFIED**  
WORK THIS DRAWING WITH E 5

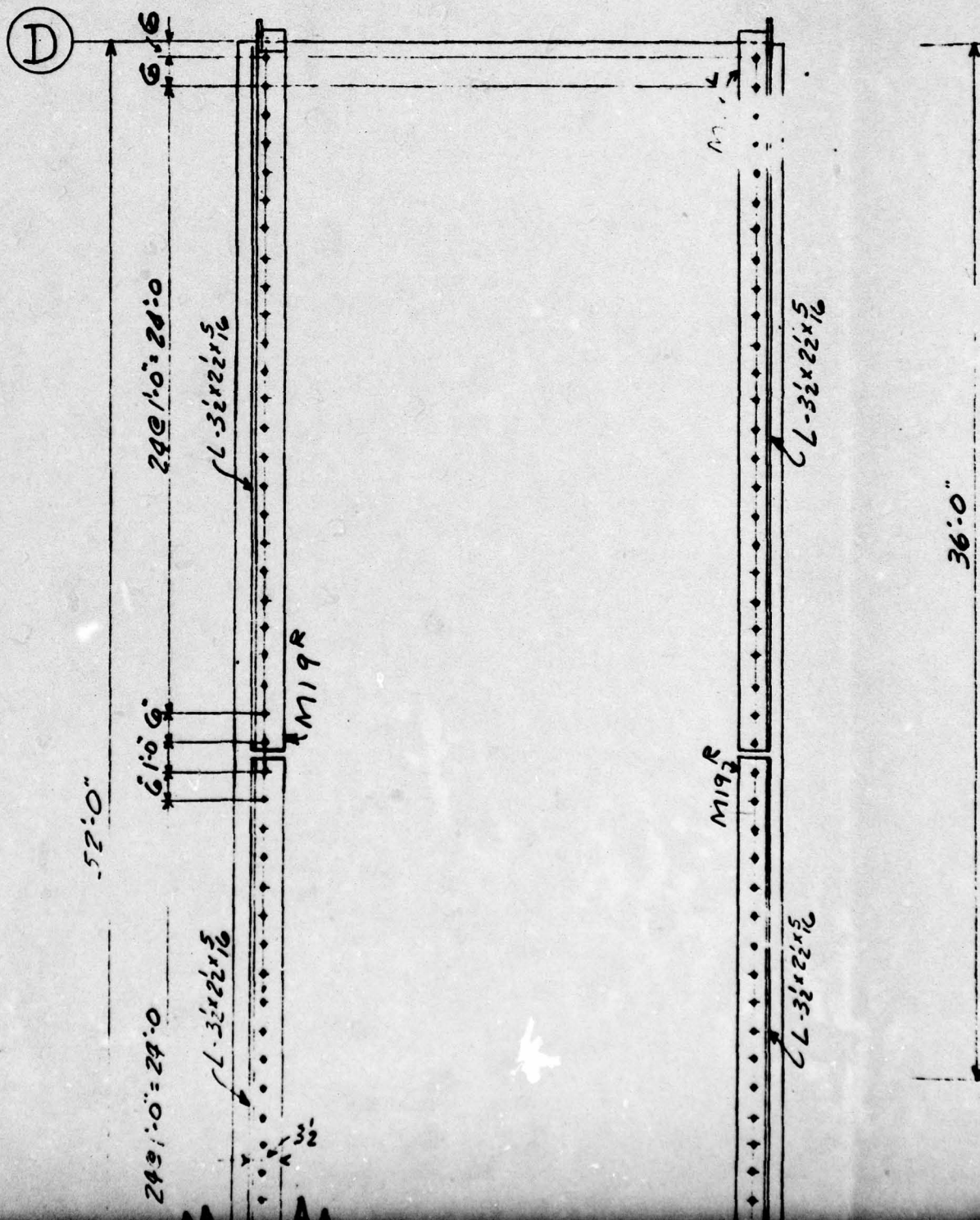


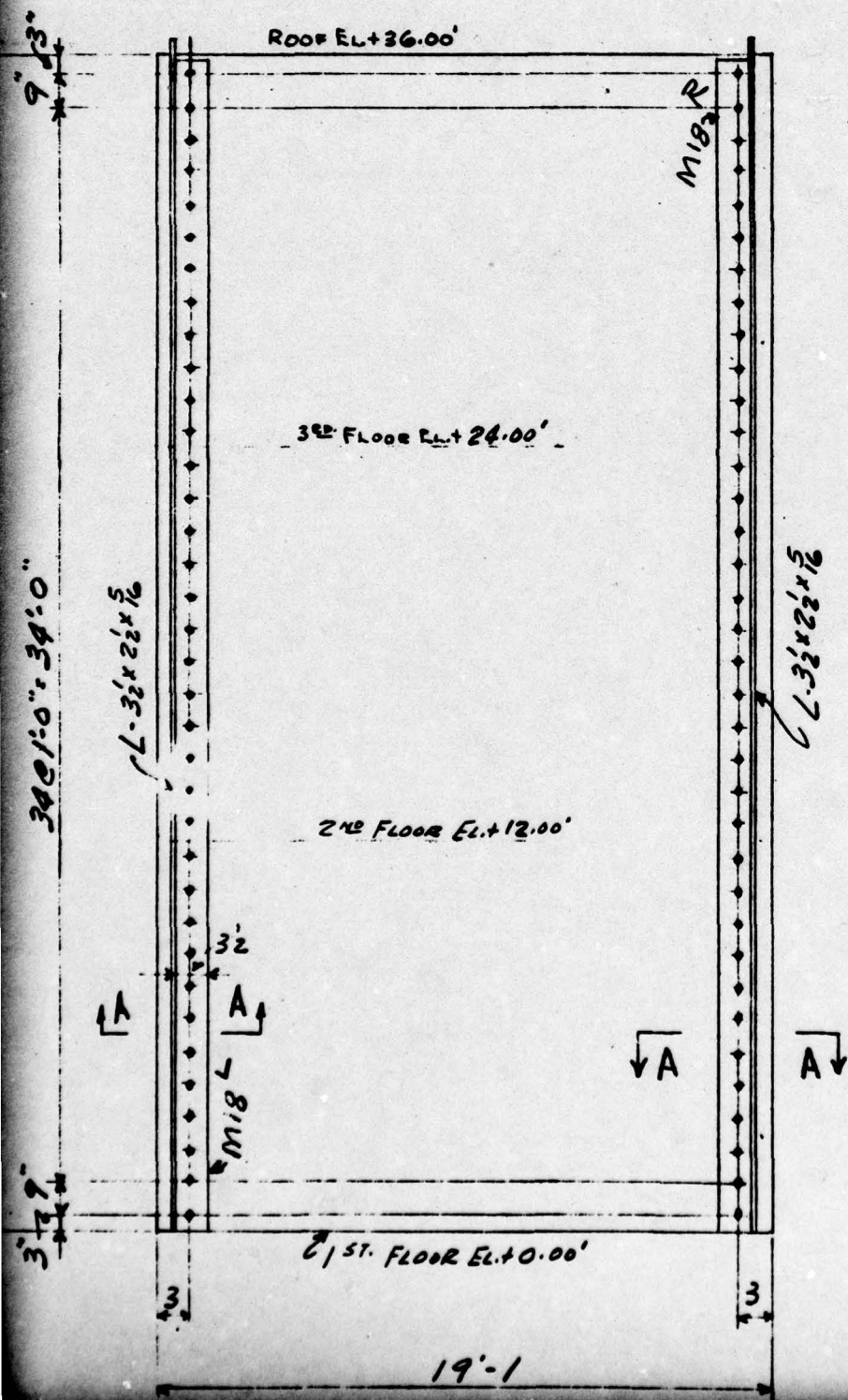
1			
NO.	DATE	BY	REVISION
HOLES			PAINT
RIVETS			
REF.			
DATE 5-2-50	DRAWN BY GOLDIE	CHECKED BY GALLAGHER	IN CHARGE OF HOLBROOK
<b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION			
HOLMES & NARVER BUILDING NO. 7			ORDER NO. 48357
ERECTOR & ANCHOR BOLT PLANT - ELEVATION			DRAWING NO. EG

6



UNCLASSIFIED





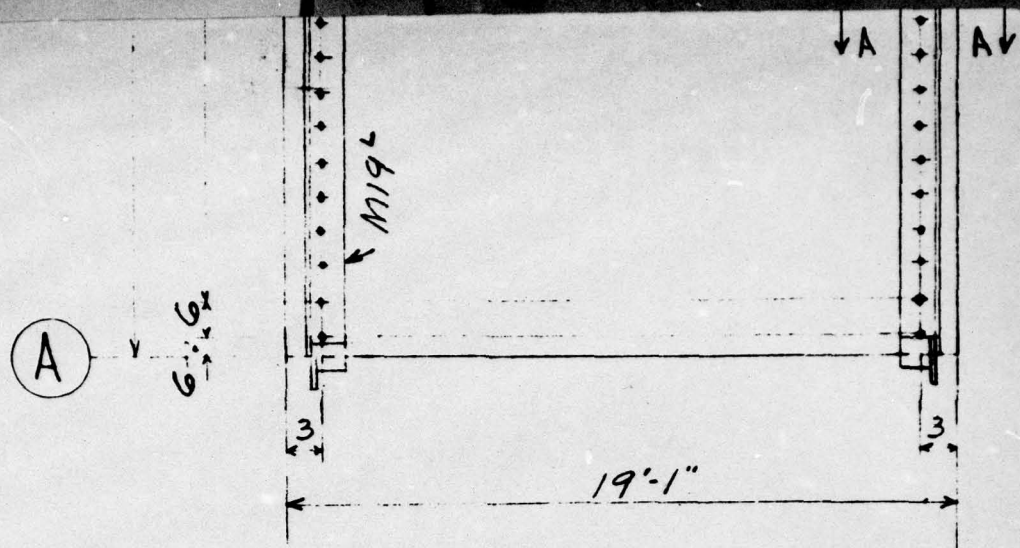


3

PAGE 83

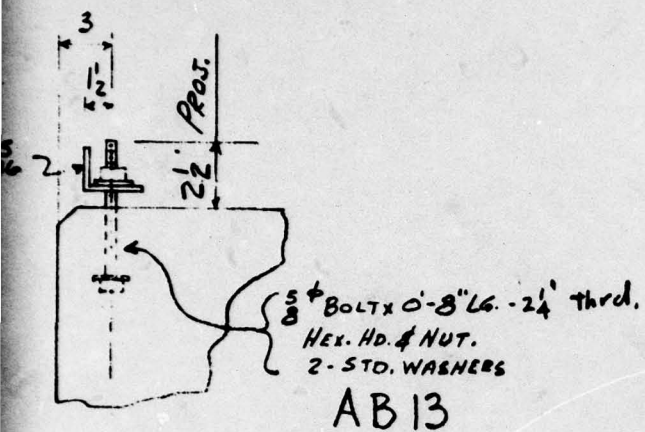
1961 11 23 11 11





ROOF PLAN FOR BUILDINGS NO. 3 & NO. 4 E/ NO. 5

ELEVATION ALONG LINES (A) & (D)



SECTION - AA  
(TYPICAL)

FIG. A2.52



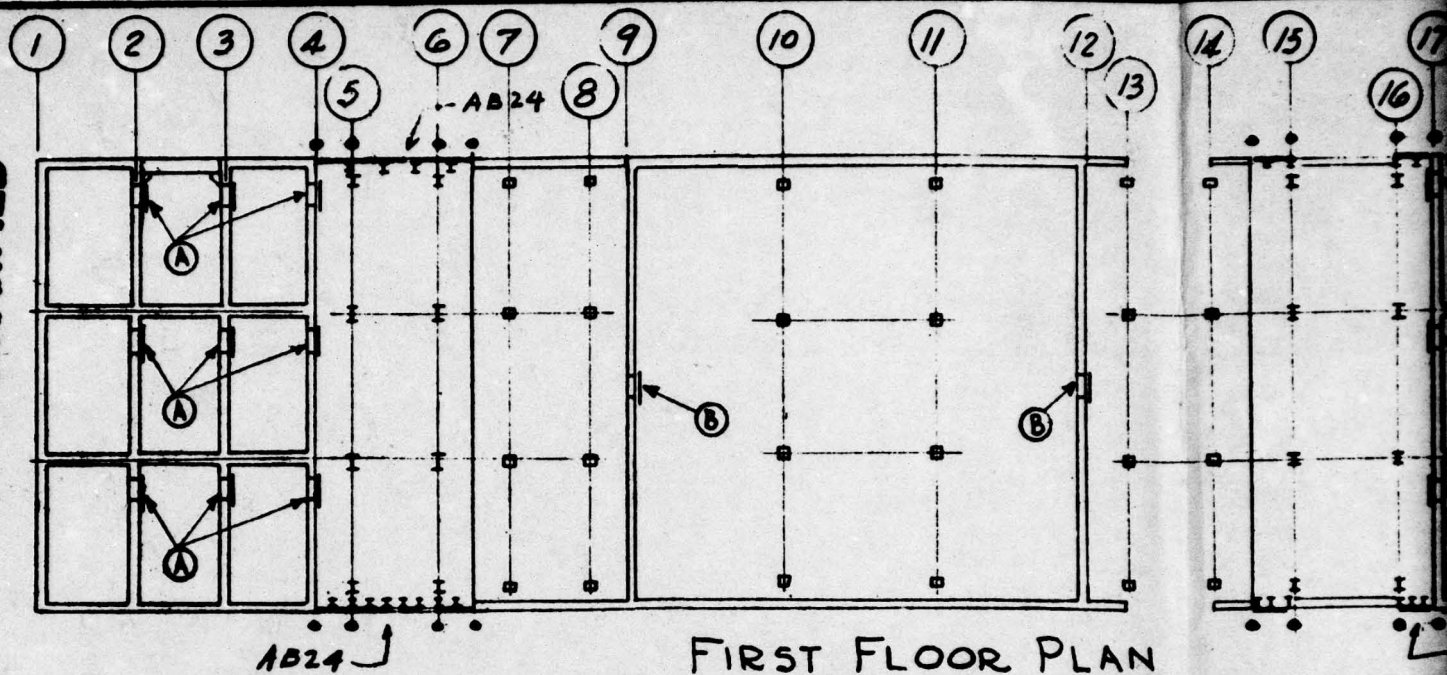
UNCLASSIFIED

ANCHOR BOLTS FURNISHED BY	<u>C.W.S.C.</u>
ANCHOR BOLTS SET BY	<u>OTHERS</u>
BASE PLATES SET BY	<u>NONE</u>
GROUT FURNISHED BY	<u>OTHERS</u>
GROUT POURED BY	<u>OTHERS</u>
NOTE: ANCHOR BOLTS MUST BE SET ACCURATELY TO LINE, CENTERS AND ELEVATION AS SHOWN ON THIS DRAWING.	
CONSOLIDATED WESTERN STEEL CORPORATION NOT RESPONSIBLE FOR THE ACCURACY OF ANCHOR BOLT SETTING WHEN SET BY OTHERS.	

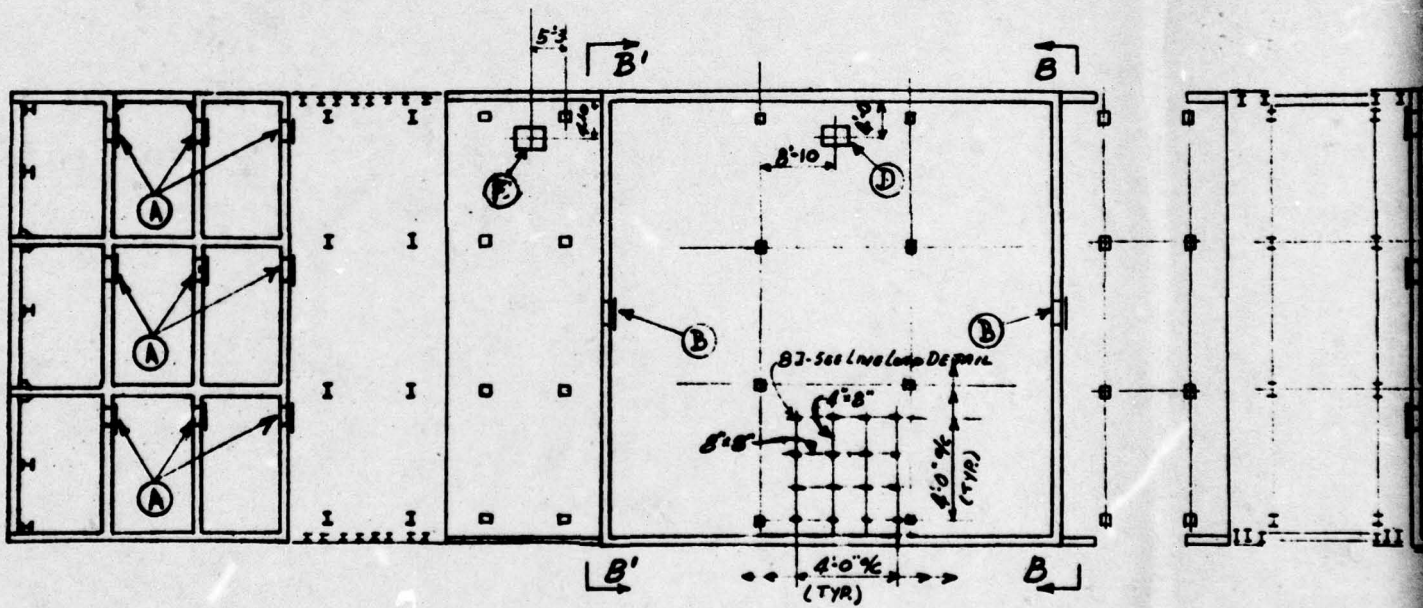
ERECTION	BY	<u>OTHERS</u>
FIELD CONN'S		<u>See Sh. E2</u>
FIELD PAINT		
INSPECTION	BY	
BLDG. PERMIT No.		

1				
NO.	DATE	BY	REVISION	
HOLES			PAINT	
RIVETS				
REF.				
DATE	DRAWN BY	CHECKED BY	IN-CHARGE OF	
<u>5-3-50</u>	<u>GOLDIE</u>	<u>GALLAGHER</u>	<u>Holbrook</u>	
CONSOLIDATED WESTERN STEEL CORPORATION LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION				
<u>HOLMES &amp; NARVER</u> <u>BUILDINGS NO. 3 &amp; NO. 4 &amp; NO. 5</u>			DRAWING NO. <u>49357</u>	
<u>ERECTION &amp; ANCHOR BOLT PLAN</u>			SHEET NO. <u>57</u>	

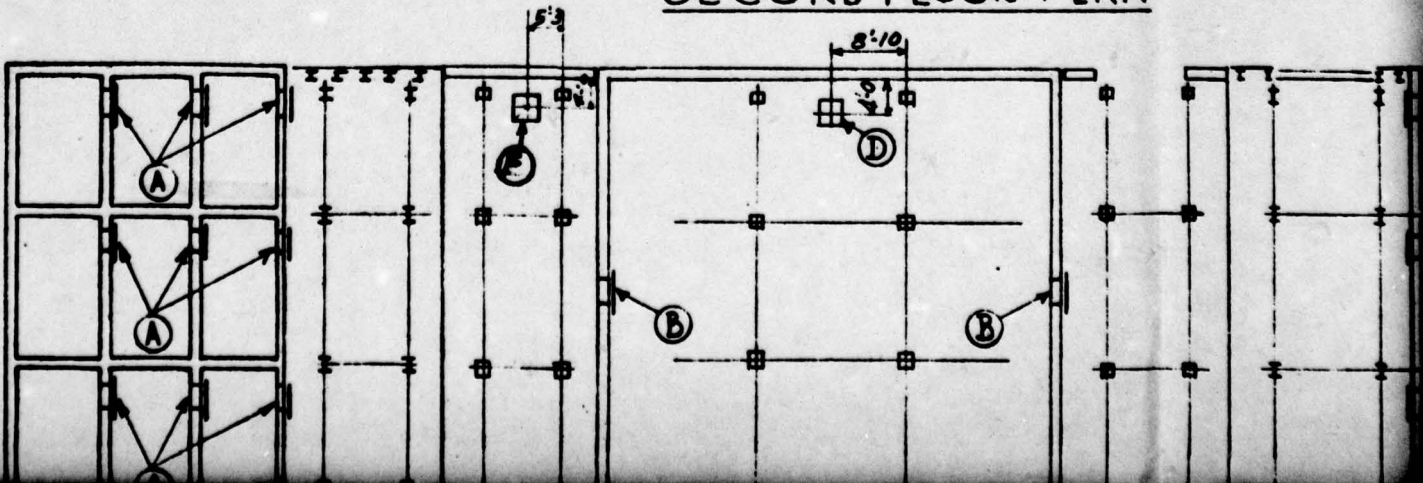
UNCLASSIFIED



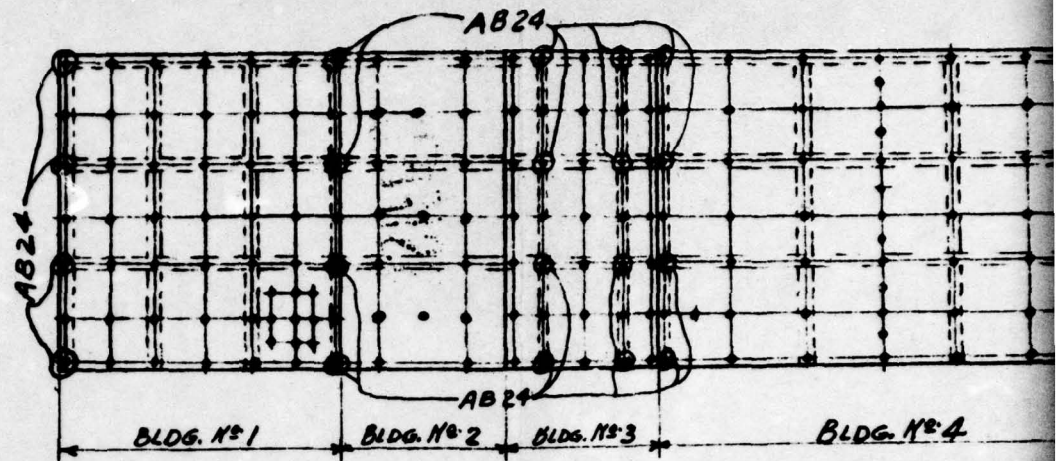
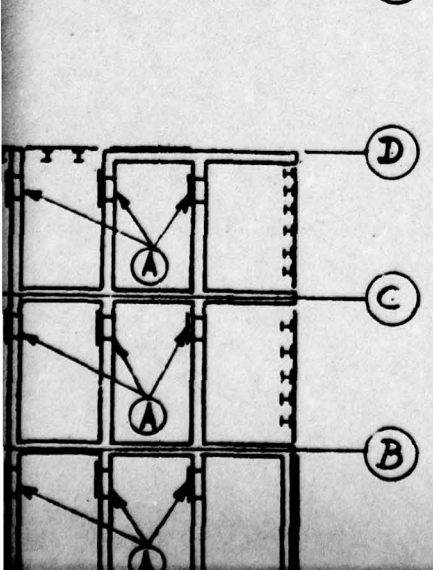
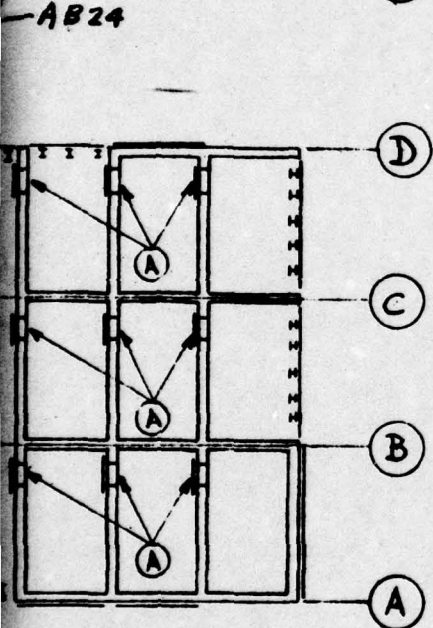
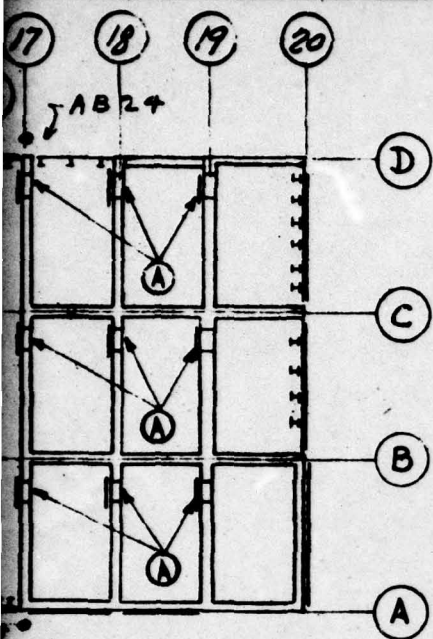
FIRST FLOOR PLAN



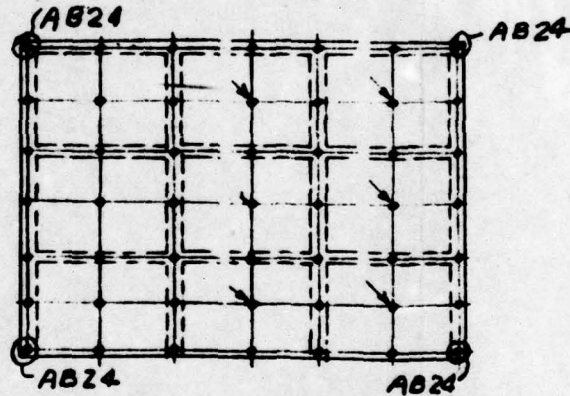
SECOND FLOOR PLAN



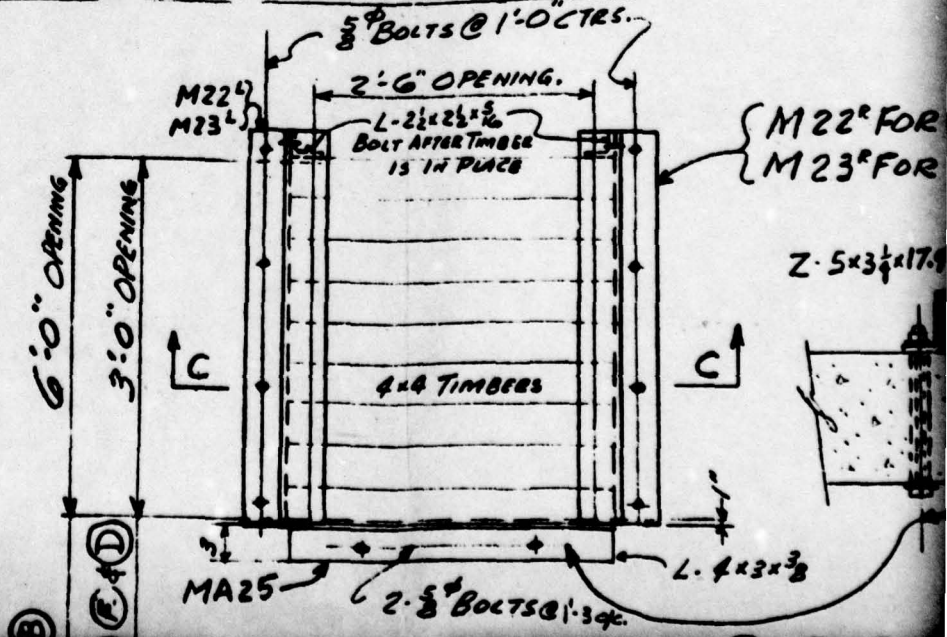


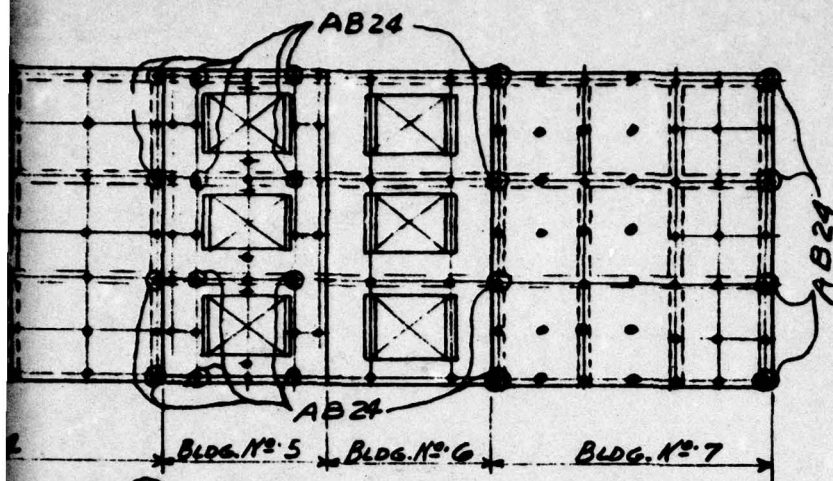


ELEVATION ALONG LINE  
ELEVATION ALONG LINE  
(SHOWING LOCATION OF SURVEY



ELEVATION ALONG LINE ① - SHOWN  
ELEVATION ALONG LINE ② - SIMILAR  
(SHOWING LOCATION OF SURVEY POINTS) AB 24

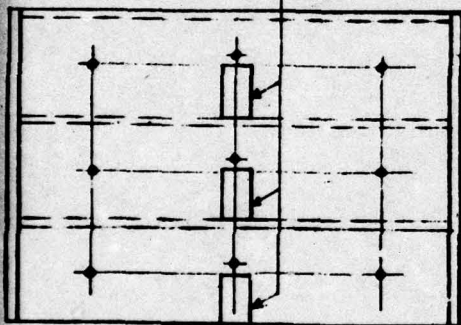




LINE (A) - SHOWN

LINE (D) - OPP.

SURVEY POINTS) AB24 (B)

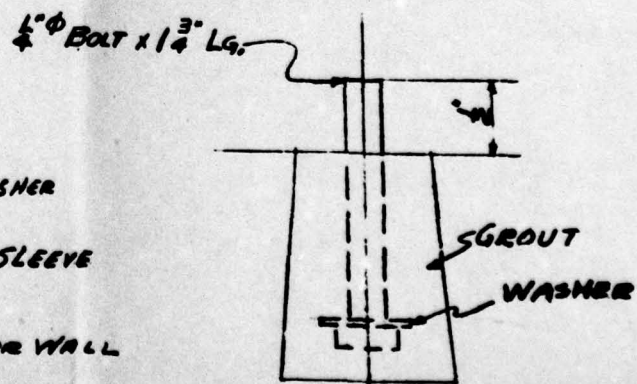
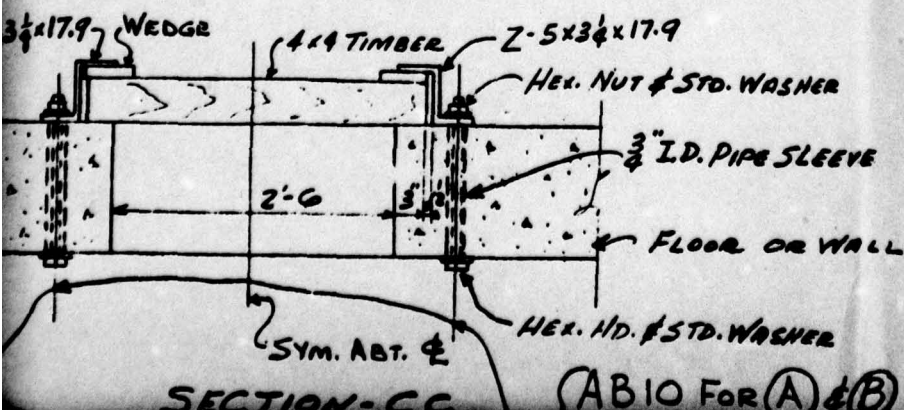


SECTION - BB - SHOWN

SECTION - B' B' - OPP

\* FOR (A) (F) & (D)

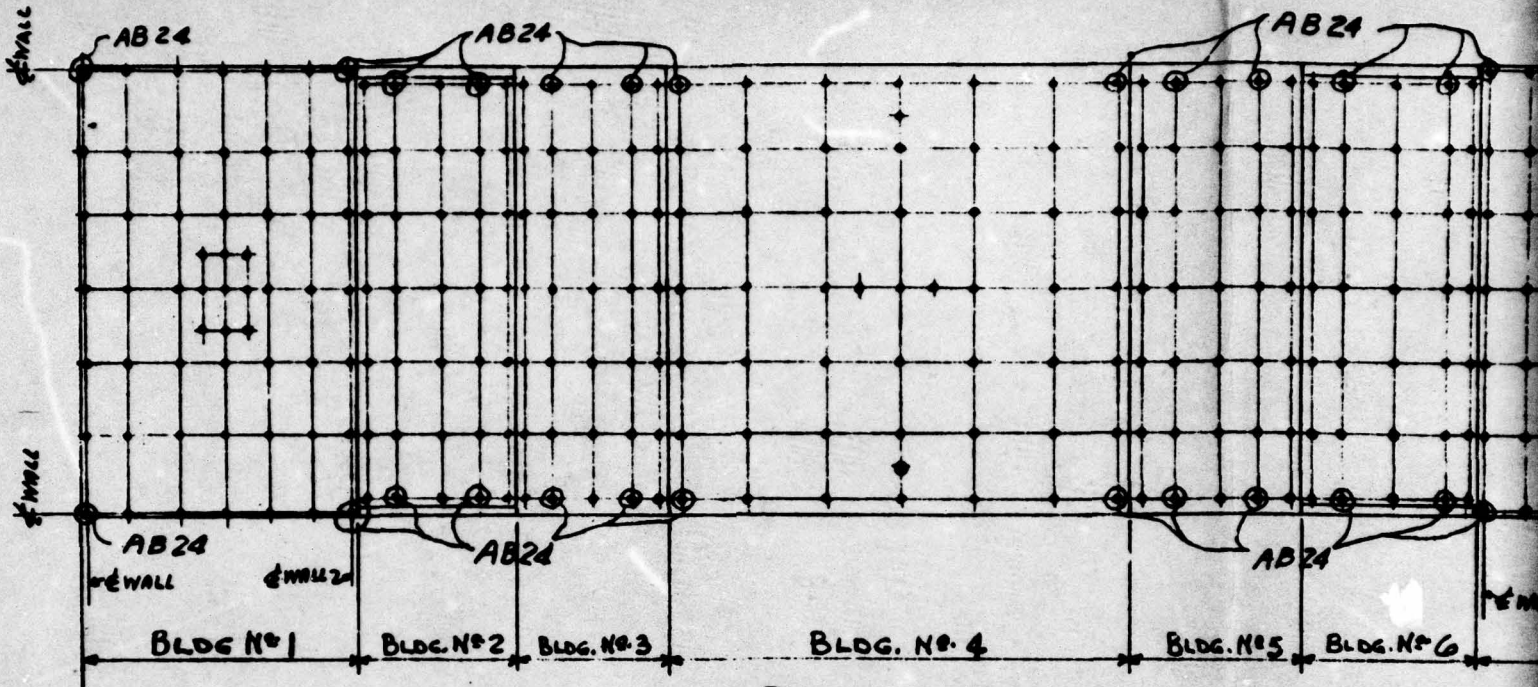
\* FOR (B)



DETAIL OF SURVEY POINT  
AB24

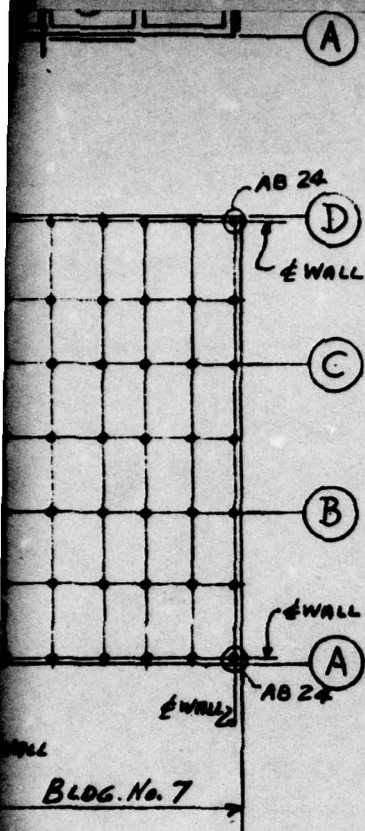


### THIRD FLOOR PLAN



### ROOF PLAN

(SHOWING LOCATION OF SURVEY POINTS) AB 24

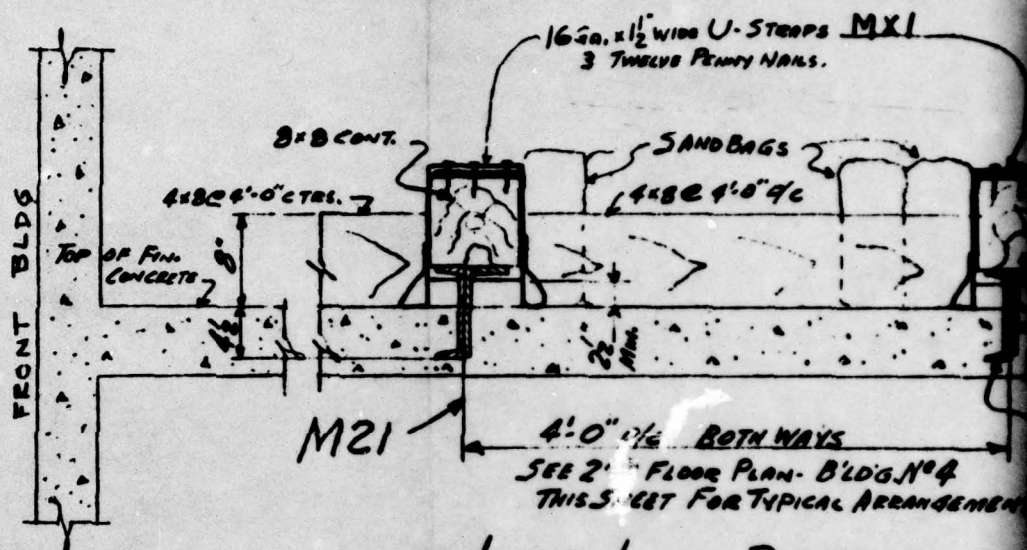


For

For

COVER FOR ACCESS WAY (A)-(F) (D) SHOW

COVER FOR ACCESS WAY (B) - SIMILAR



LIVE LOAD DETAIL

FOR 2ND & 3RD FLOORS - BUILDINGS 2-3-4-5

FIG. A2.53



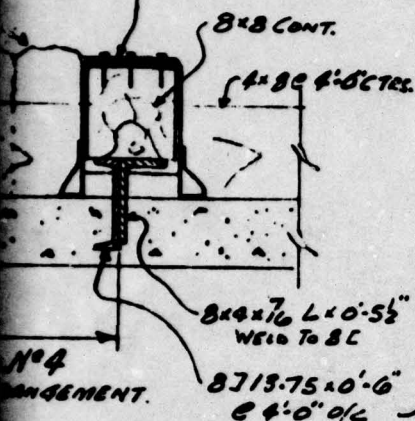
SHOWN  
LAR

AB 12 FOR (F)  
AB 11 FOR (D)

NO DRIVIT PINS FURNISHED BY  
CONSOLIDATED WESTERN STEEL, CORP.

NOTE:

LOCATION OF SURVEY POINTS  
TO BE VERIFIED BY CONTRACTING OFFICER  
BEFORE INSTALLATION.

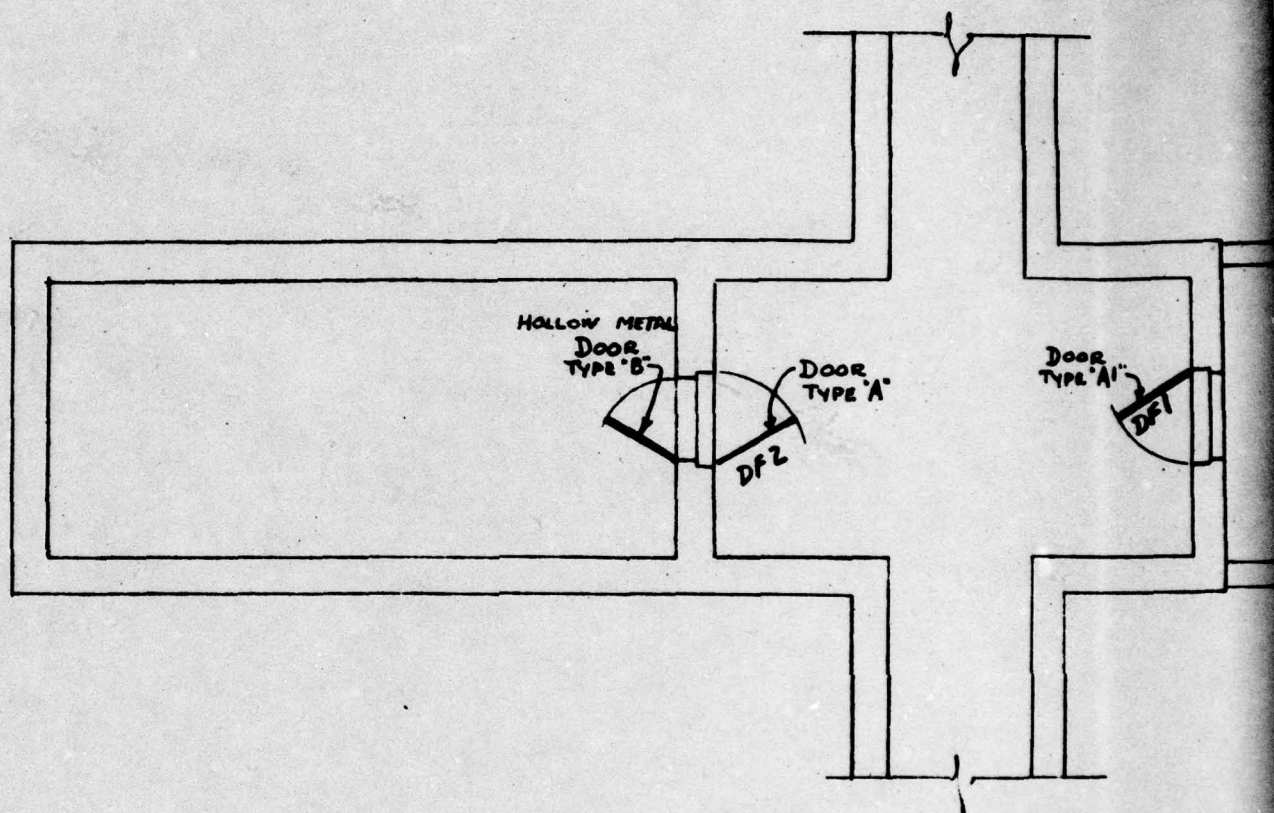


3-4-5#6

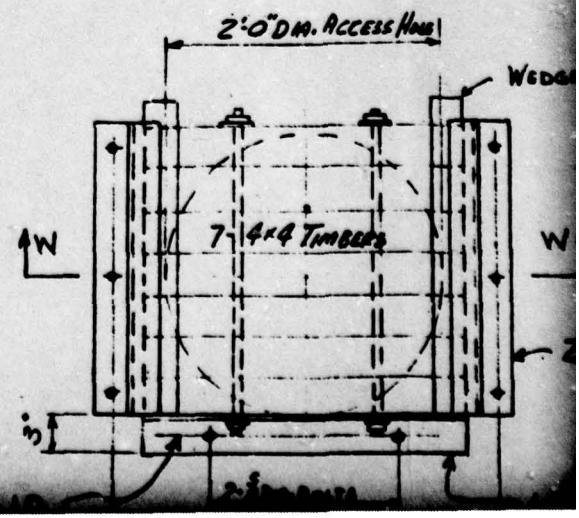
**UNCLASSIFIED**

1			
NO.	DATE	BY	REVISION
HOLES	PAINT		
RIVETS			
REF.			
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF
5-11-50	GOLDIE	GALLAGHER	HOLMES
CONSOLIDATED WESTERN STEEL CORPORATION LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION			
HOLMES & NARVER			ORDER NO. 48357
LOCATION PLAN FOR SURVEY POINTS AND ACCESS WAYS			DRAWING NO. E 8

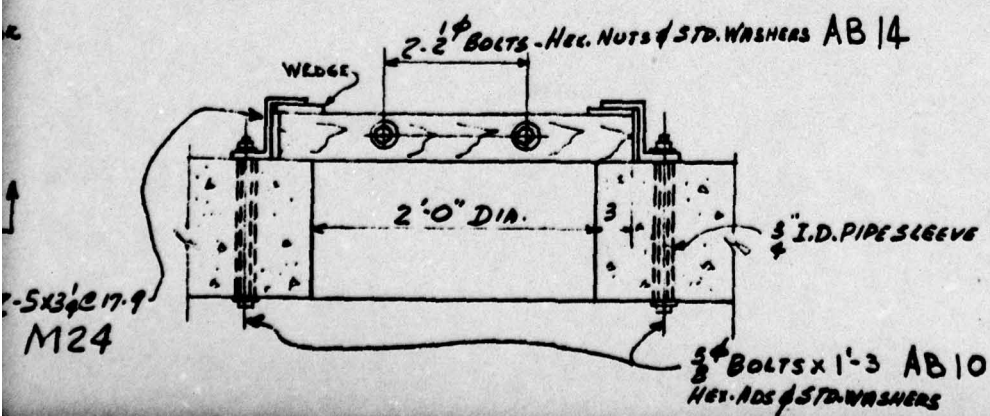
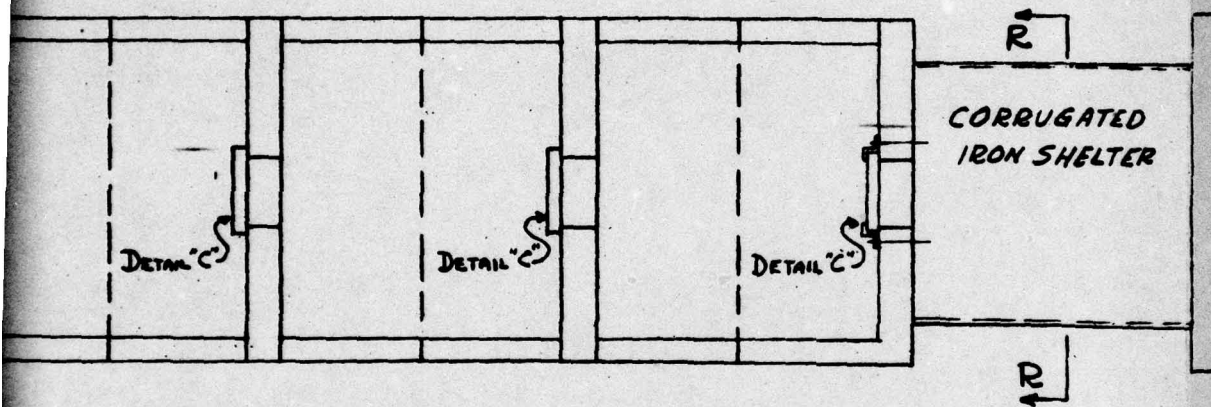
UNCLASSIFIED



PLAN OF SHELTERS



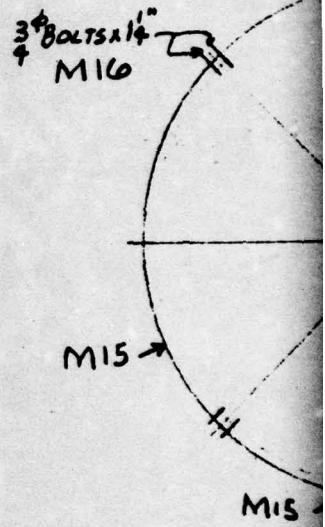




1967 V22111

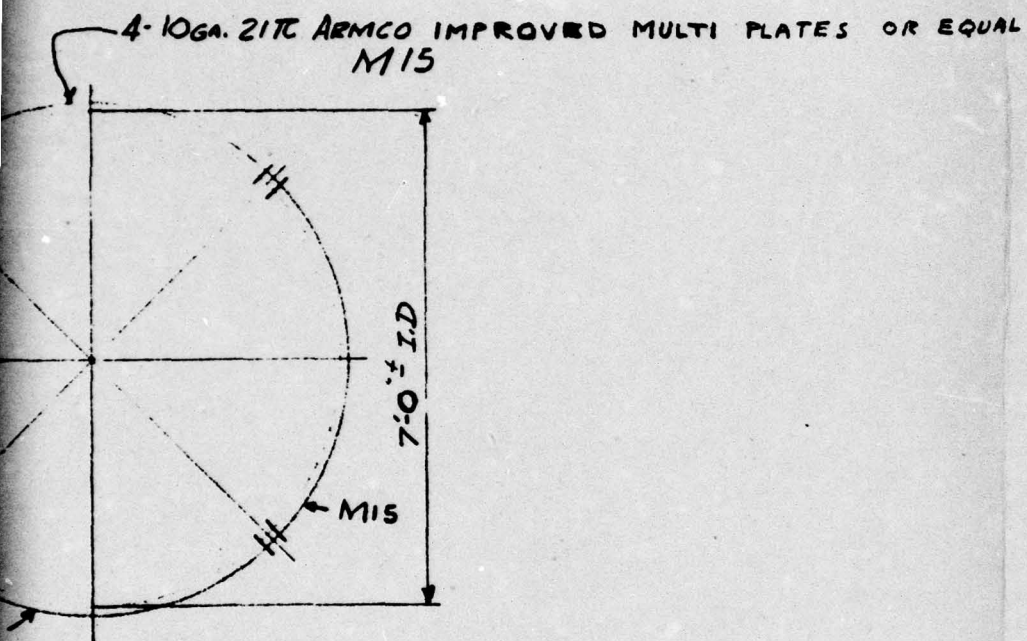


DETAIL 'C' - COVER FOR



5

ACCESS WAY

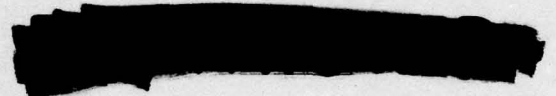


SECTION-RR

FIG. A2.54



UNCLASSIFIED



1			
NO.	DATE	BY	REVISION
HOLES			PAINT
RIVETS			
REF.			
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF
5-11-50	GOLDIE	GALLAGHER	HOLBROOK
CONSOLIDATED WESTERN STEEL CORPORATION LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION			
HOLMES & NARVER			ORDER NO. 48357
ERECTION PLAN OF SHELTERS			DRAWING NO. E'9

6

BYCE 82

UNCLASSIFIED

(D)

52'-0"

FACE OF SLAB

1 1/2" 1'-6 3/4"

R. M54

L-3 1/2 x 2 1/2 x 5/8

L-3 1/2 x 2 1/2 x 5/8

M28R

L-3 1/2 x 2 1/2 x 5/8

A

A

M27

M28L

L-3 1/2 x 2 1/2 x 5/8

L-3 1/2 x 2 1/2 x 5/8

R. M54

8' FOR BLOC #6

23 @ 1'-0" = 23'-0"

6'-6"

0 1'-0" = 23'-0"

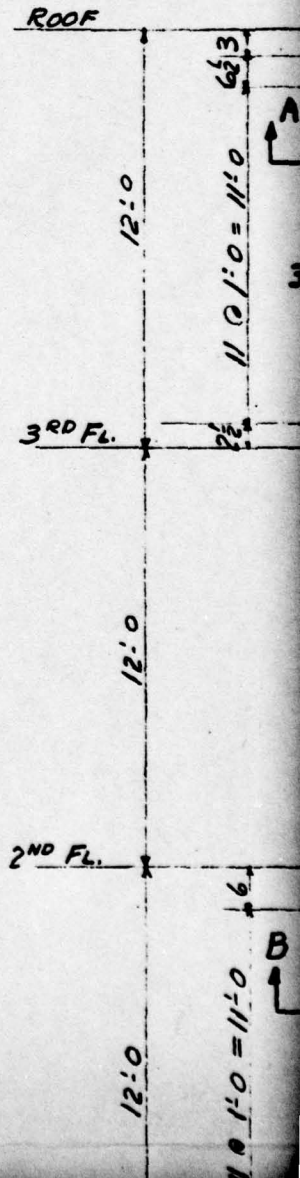
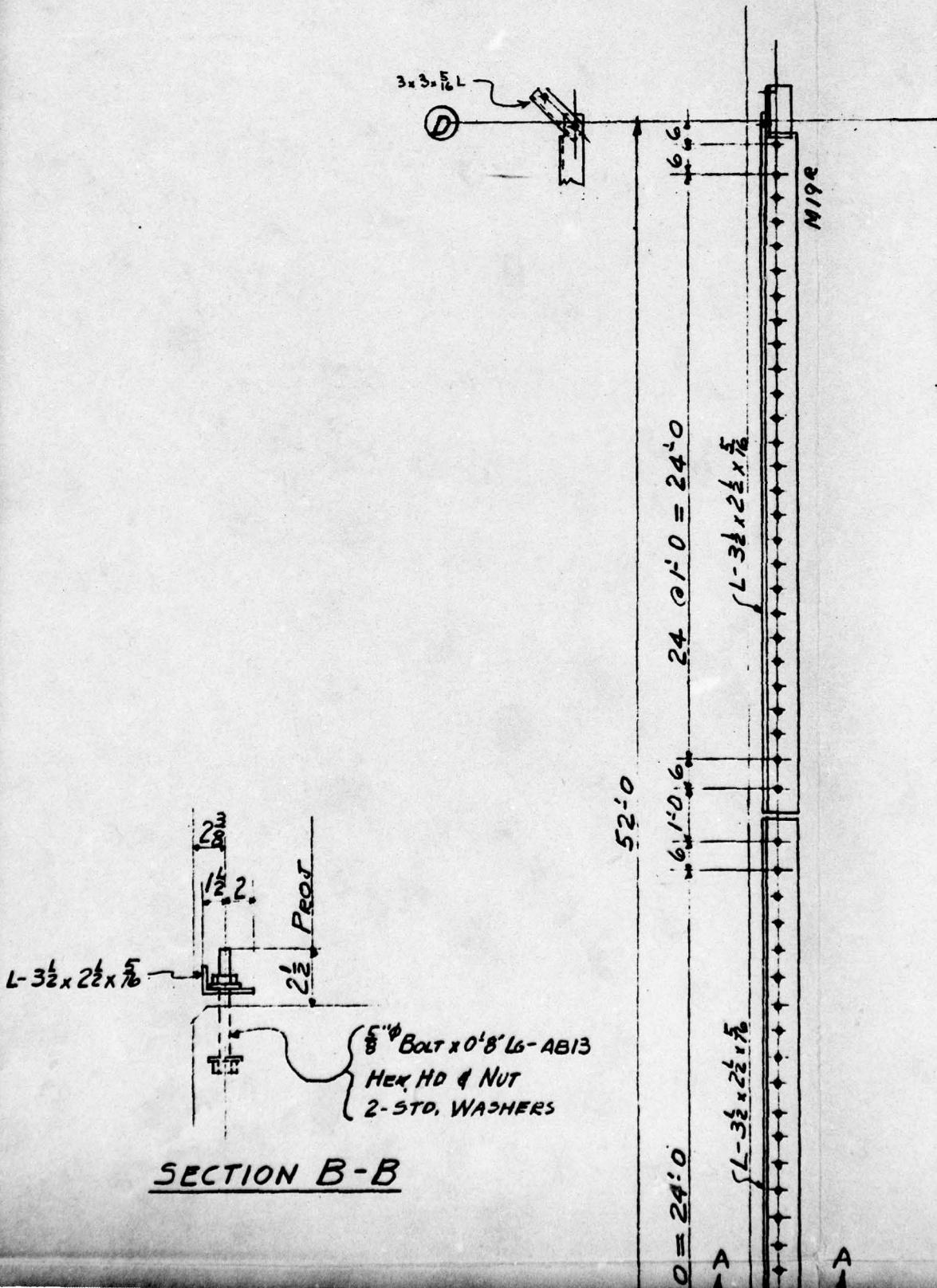
8' FOR BLOC #2

23 @ 1'-0" = 23'-0"

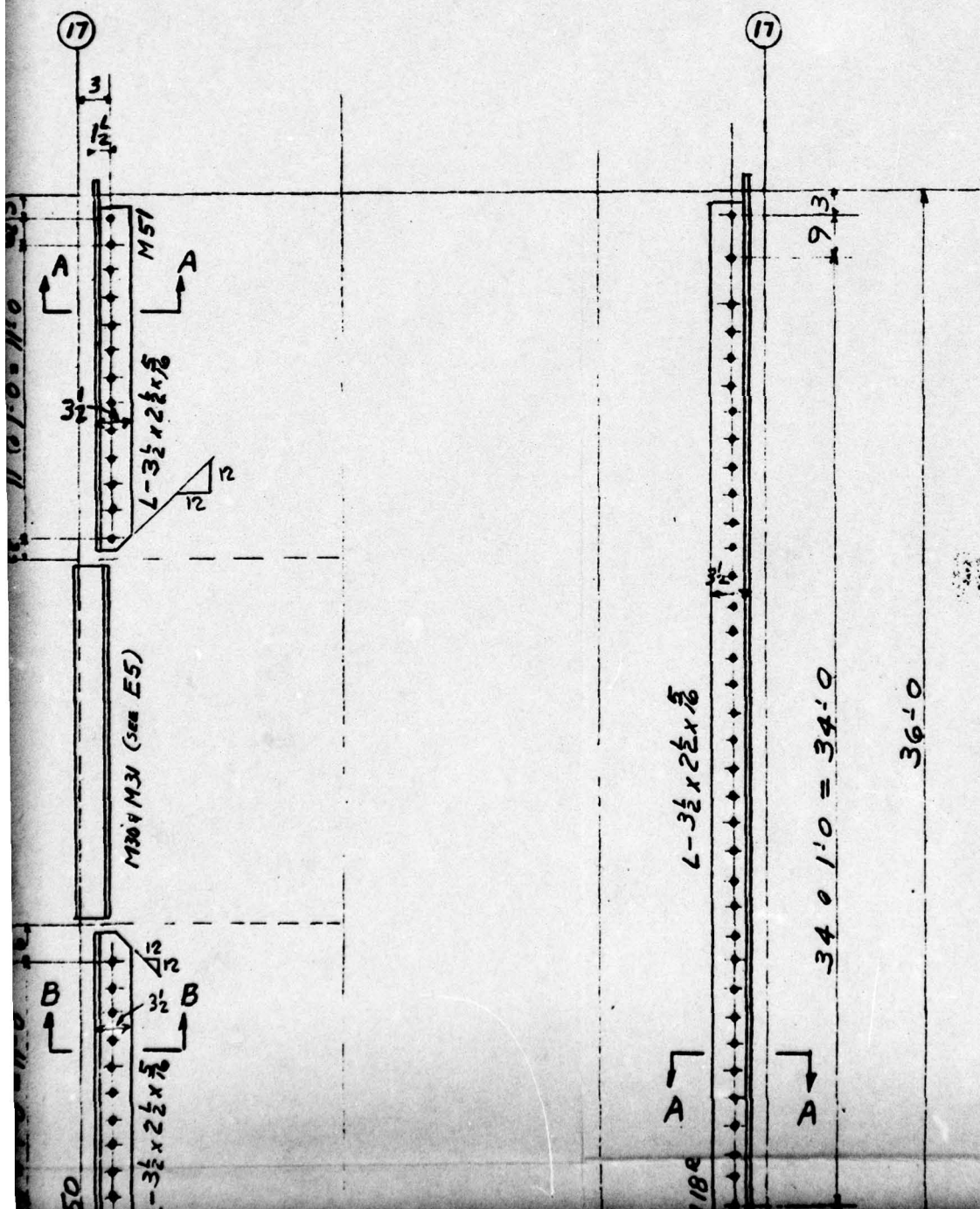
6'-6"

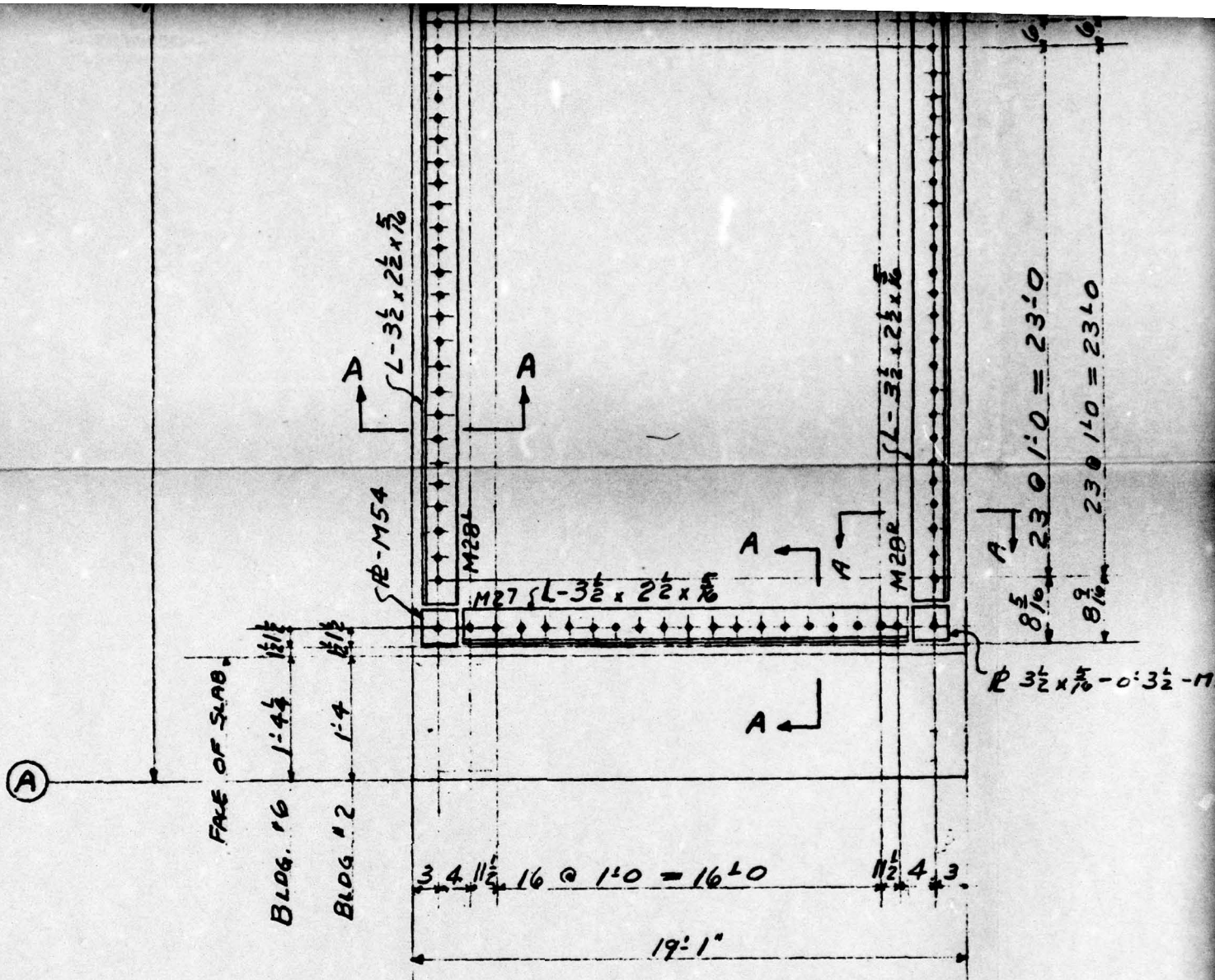
30 1'-0" = 23'-0"











ROOF PLAN FOR BLDG'S No. 2 & No. 6.



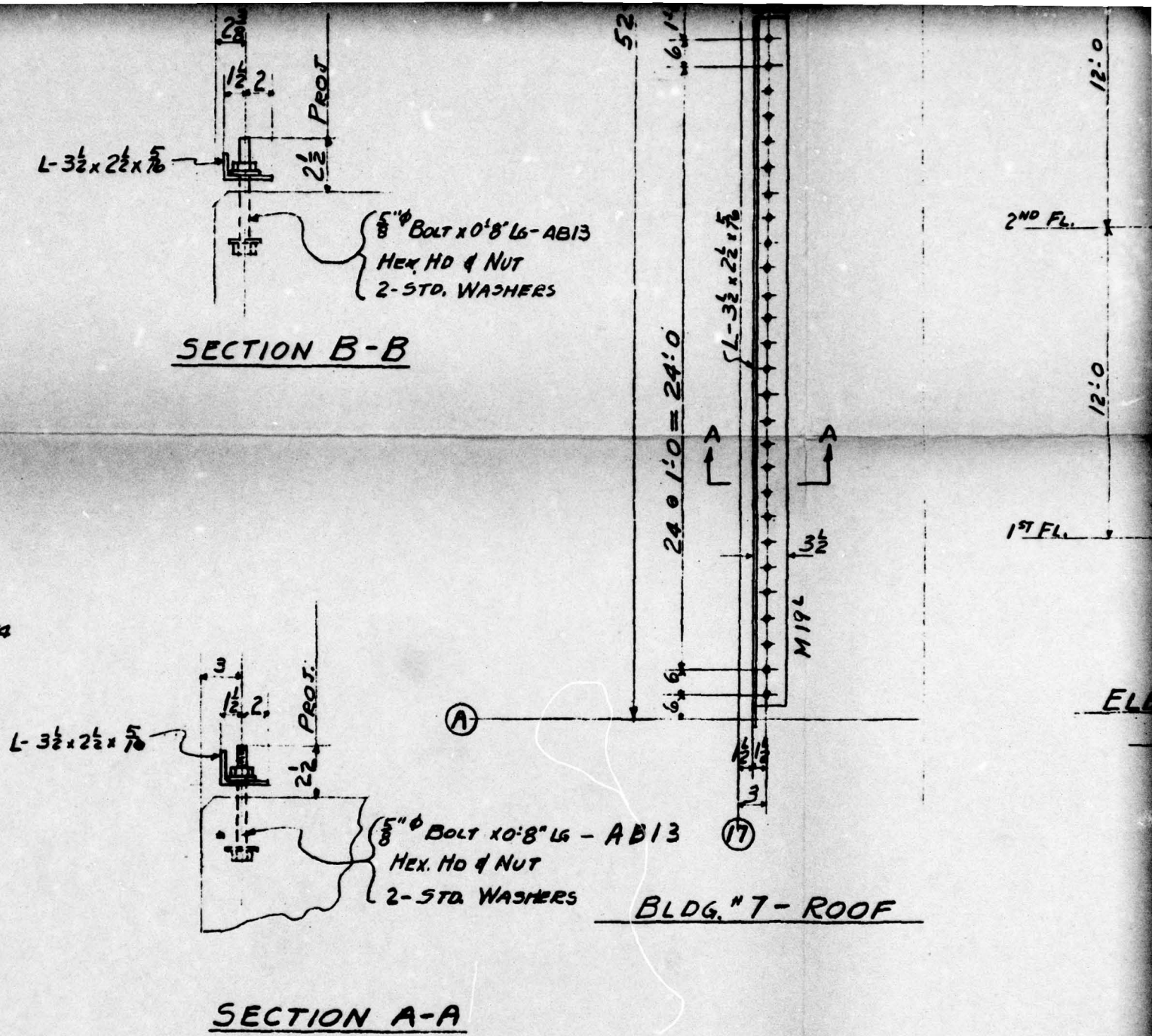
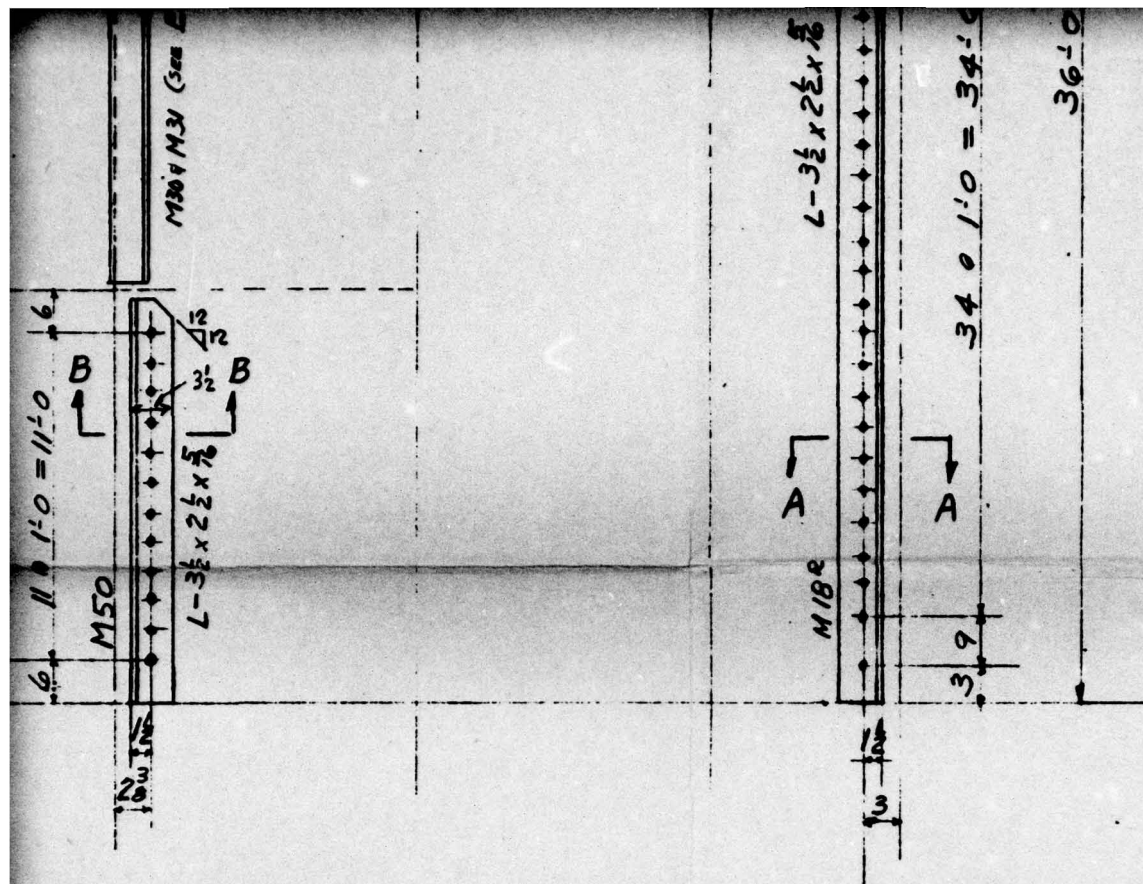


FIG. A2.55



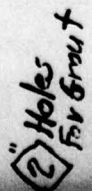
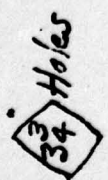


ELEV. ALONG LINE (A)  
BLDG. # 7

ELEV. ALONG LINE (D)  
BLDG. # 7

UNCLASSIFIED

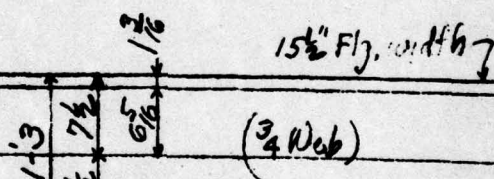
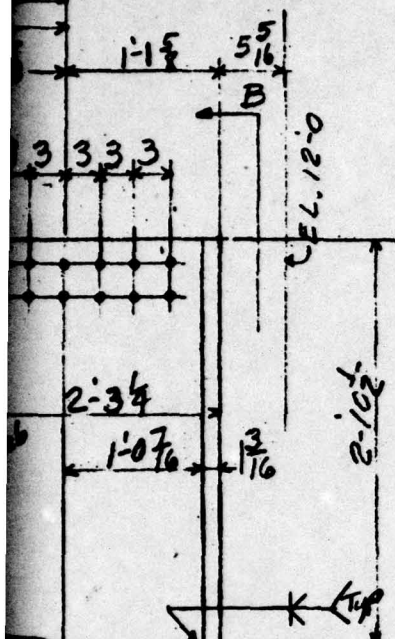
1			
NO.	DATE	BY	REVISION
HOLES	PAINT		
RIVETS			
REF.			
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF
5-18-50	SLANGEN	GALLAGHER	HOLBROOK
<b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION			
HOLMES & NARVER BUILDINGS NO 2 & NO 6 & NO 7			ORDER NO. <b>48357</b>
ANCHOR BOLT PLAN			DRAWER NO. <b>E10</b>



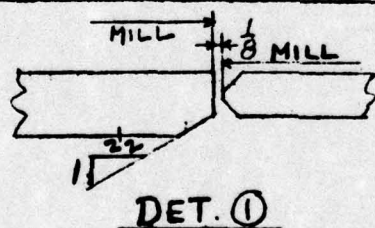
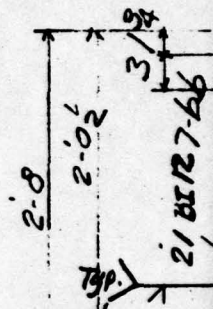


29'-1 1/8  
(14CB150) mb 12'-3 5/16

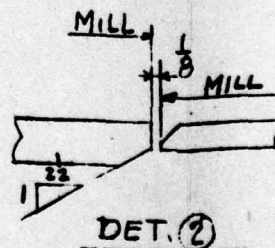
22'-2 3/8



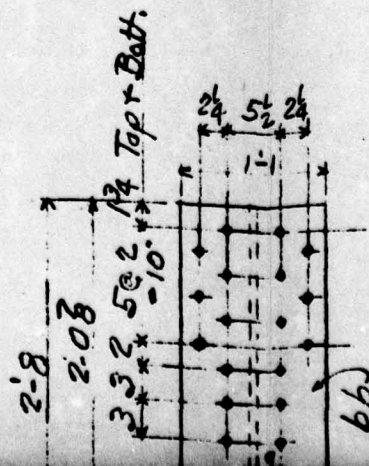
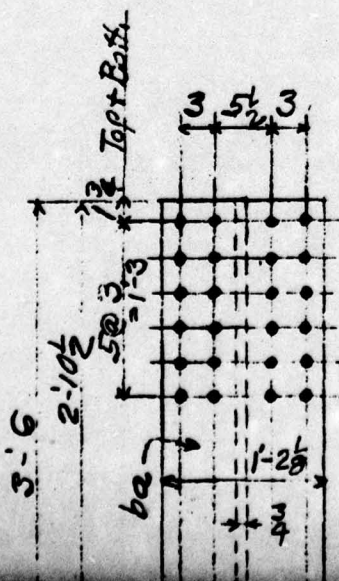
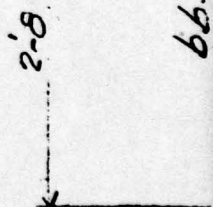
(3/4 No. 6)



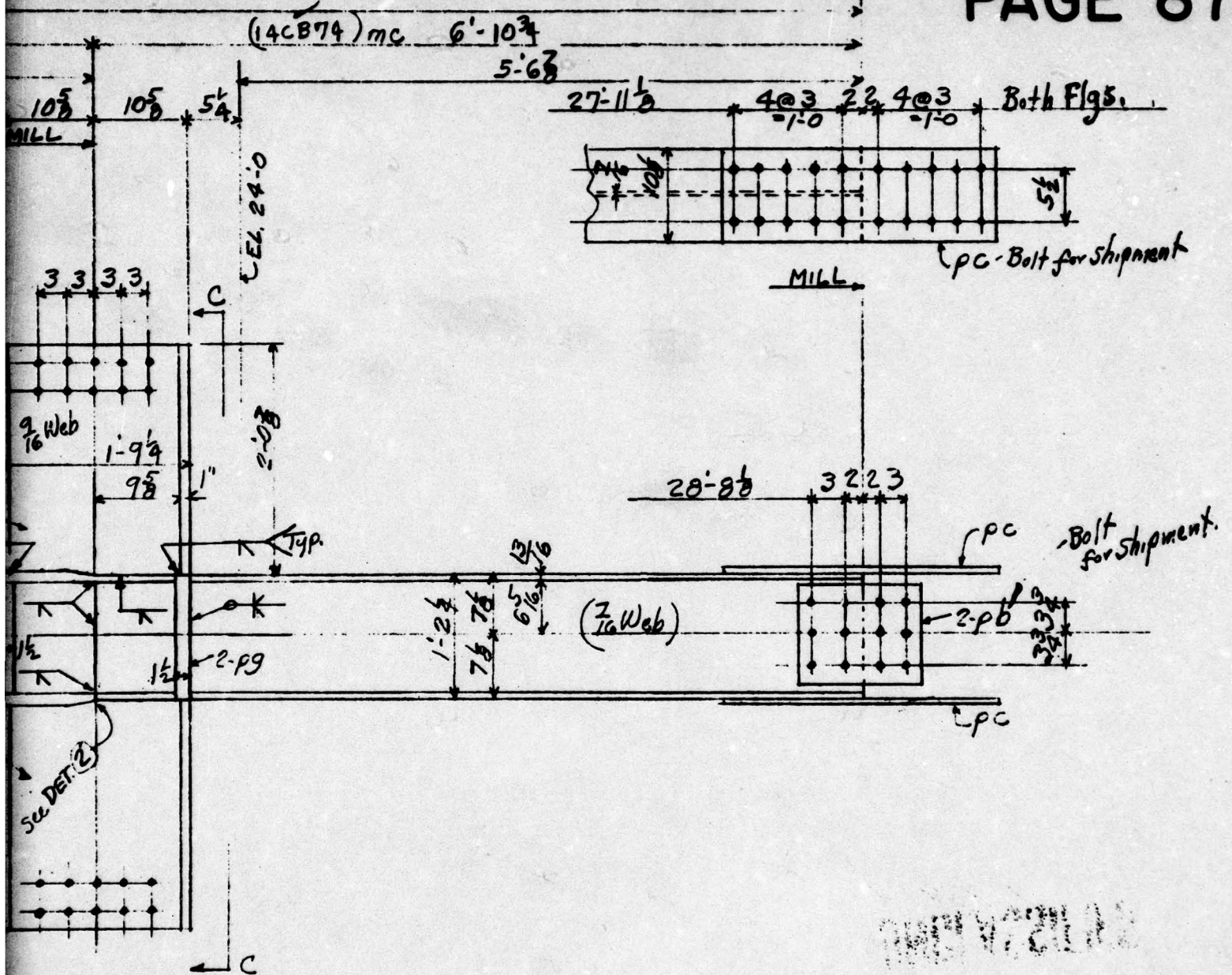
DET. ①



DET. ②



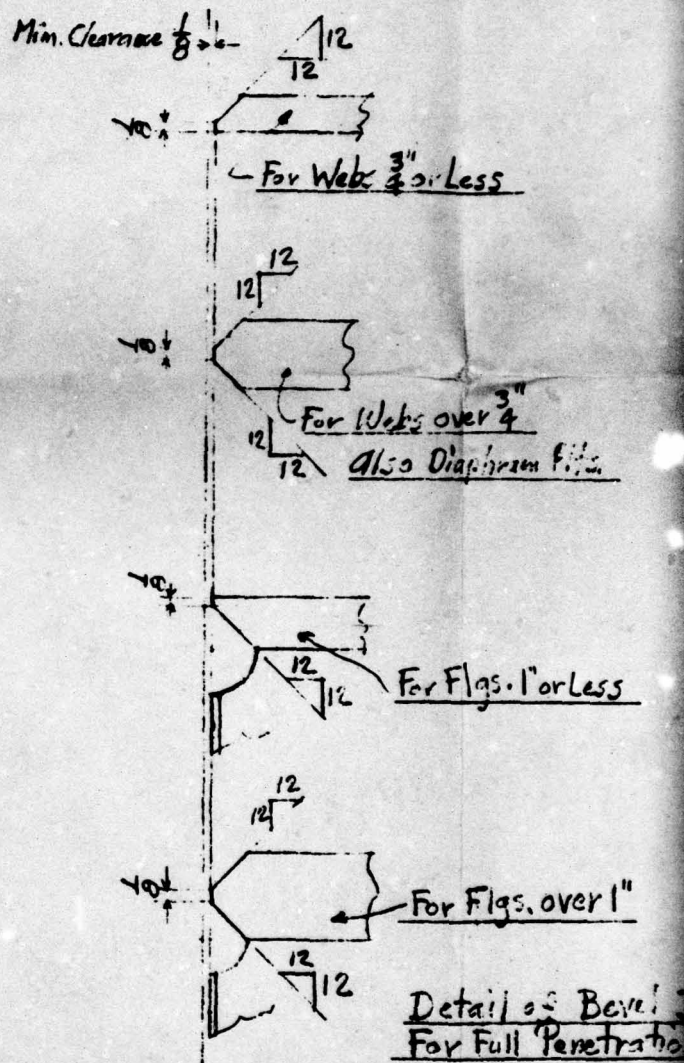
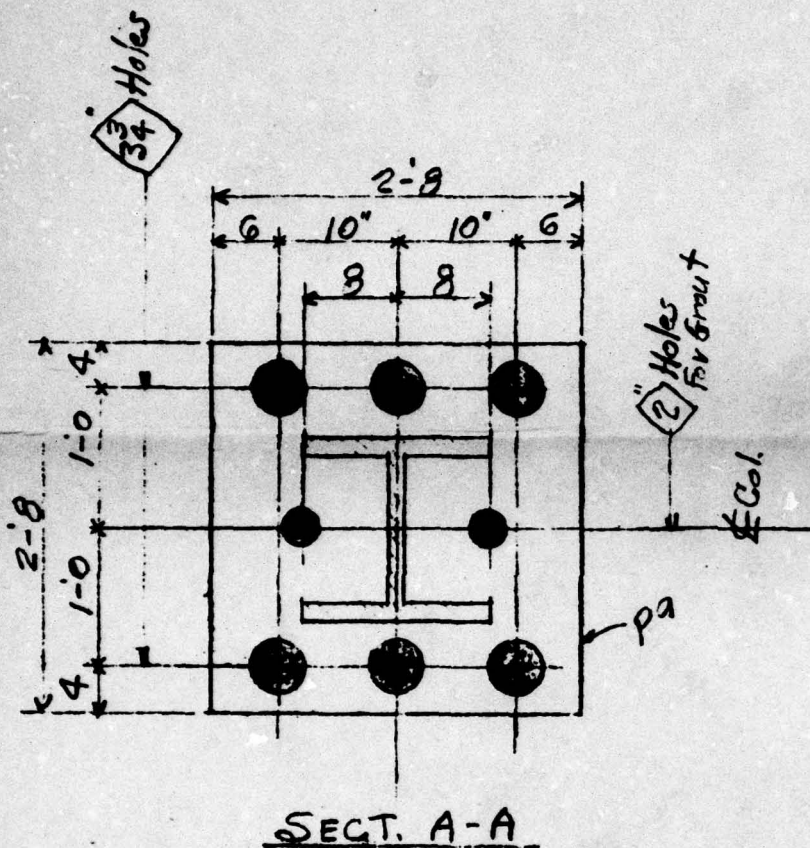
STR  
RE



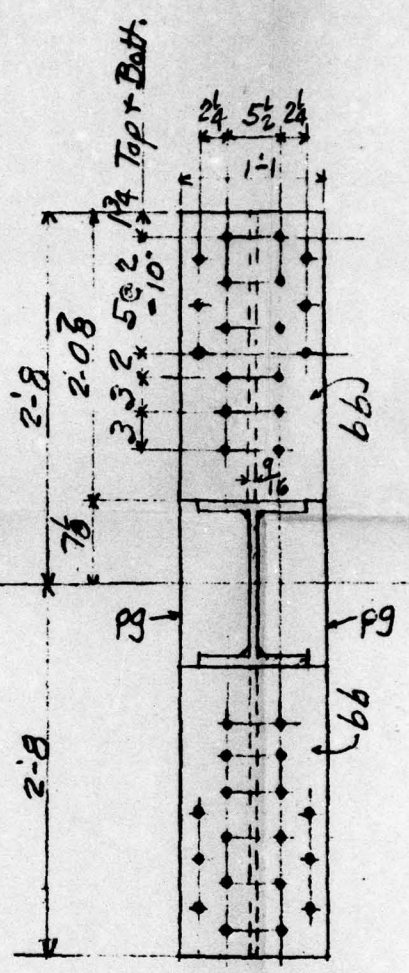
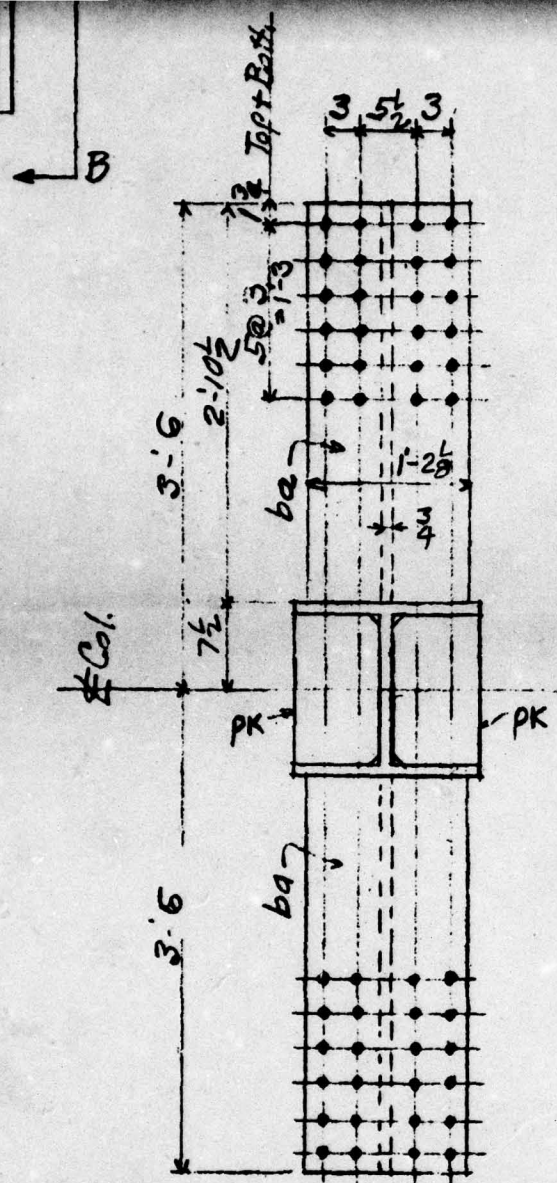
One-	Col. B5-2	
One-	C5-2	
One-	B6-2	
One-	C6-2	Alike
One-	B15-6	
One-	C15-6	

LESS  
 BELIEVE }





LINE	SHIP. PCB.	DETAIL. PCB.	DESCRIPTION	LENGTH OR PATTERN NO.	PIECE MARK	MATL.	DEPTS.	MILL LIST	PILE				LINE	SHIP. PCB.	DETAIL. PCB.	
1	1		Col.		B5-2		SBS		1				18		16	21
2	1				C5-2				1				19		16	PL
3	1				B6-2				1				20		16	PL
4	1				C6-2				1				21		16	PL



STRE  
REL

Joint  
Groove Welds

FIG. A2.56



RESS }  
RELIEVE } →

Cols - Stress Relieved

**UNCLASSIFIED**

1				
NO.	DATE	BY	REVISION	
NOLES	1/16" Unless Noted		PAINT 1 Shep Coat	
RIVETS			T.F.P. 24 Red Lead Base	
REF.			Linseed Oil Ready Mix	
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF	
4-26-30	Lambert	GALLAGHER	Holbrook	
<p align="center"><b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION</p>				
Holmes + Narver Bldgs No. 2 and No. 6 Columns			ORDER NO. 48357 DRAWING NO. 1	

UNCLASSIFIED

(10CB112) ma

MILL

9'-11 $\frac{3}{16}$ "

EL. 0'-5 $\frac{1}{2}$ "

SKIN CUT  
Base PL.

A

K

A

10 $\frac{3}{8}$  wide

( $\frac{3}{4}$  Web)

27BI45-ba

( $\frac{5}{8}$  WEB)

2-pd

1'-1 $\frac{7}{16}$ "

3 3 3

5 $\frac{1}{16}$ "

2'-11 $\frac{5}{16}$ "

2'-5 $\frac{1}{16}$ "

2'-0 $\frac{7}{16}$ "

1'-0" 1'-0"

9 $\frac{1}{4}$ " 9 $\frac{1}{4}$ "

5" 5"

2 Holes  
for Grout

Col.

pa

Top Box

2'-11"

3 $\frac{9}{16}$ "

4 $\frac{3}{16}$ "

1'-0"

3 5 $\frac{1}{2}$  3

2 $\frac{1}{2}$  5 $\frac{1}{2}$

1'-1"



1  
2

29'-1 $\frac{5}{8}$

2'-2 $\frac{3}{8}$

12'-3 $\frac{1}{16}$

1'-1 $\frac{7}{16}$  5 $\frac{1}{2}$



Typ.

2-pf

B

MILL

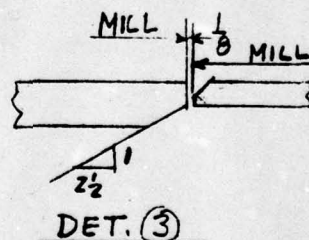
10 $\frac{5}{8}$

2'-6  
2'-0 $\frac{5}{16}$   
2' 8 1/2 127-66

(WEB 10) 1'-9

2 pf

SEE DET. (3)

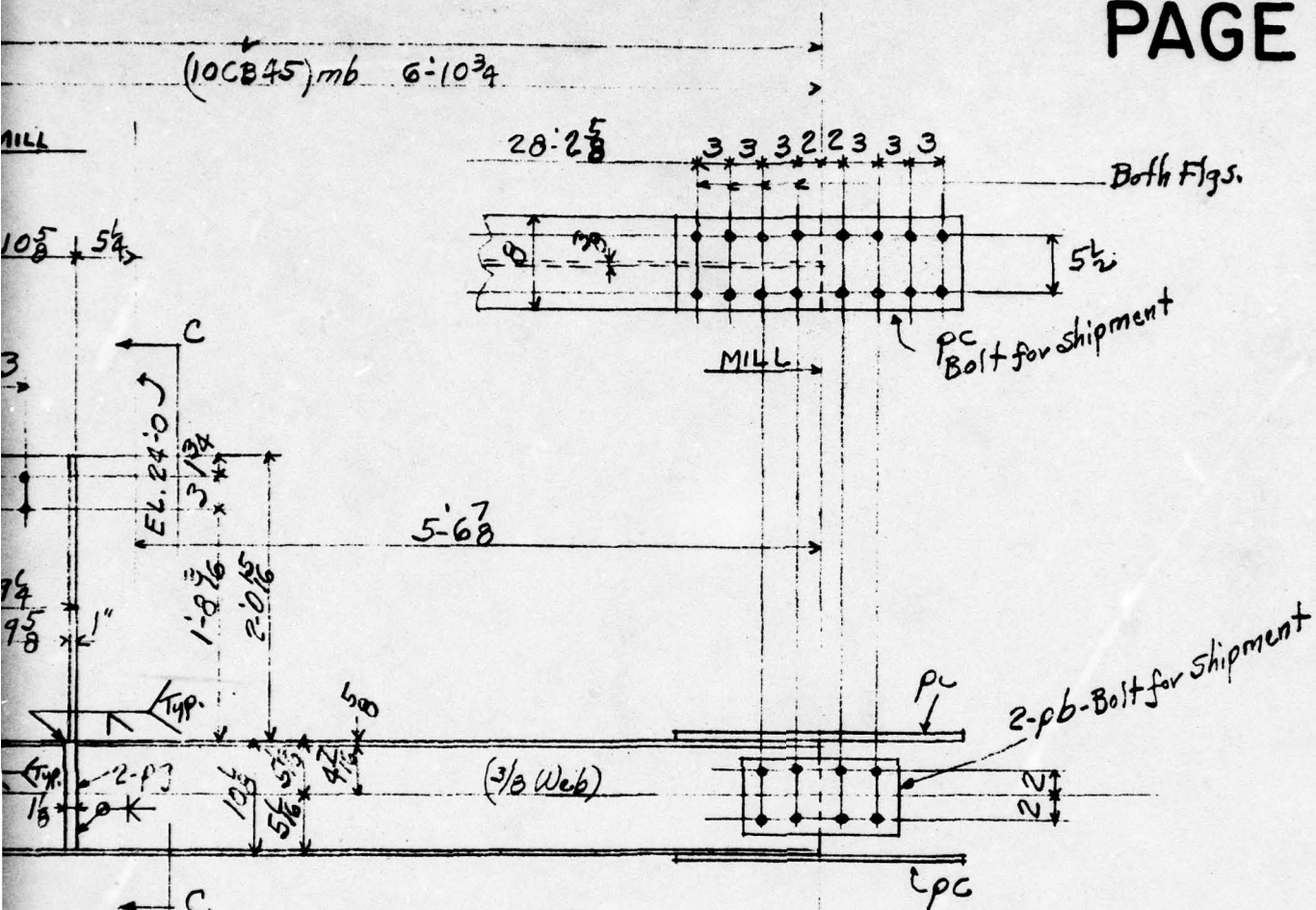


STRESS  
RELIEVE

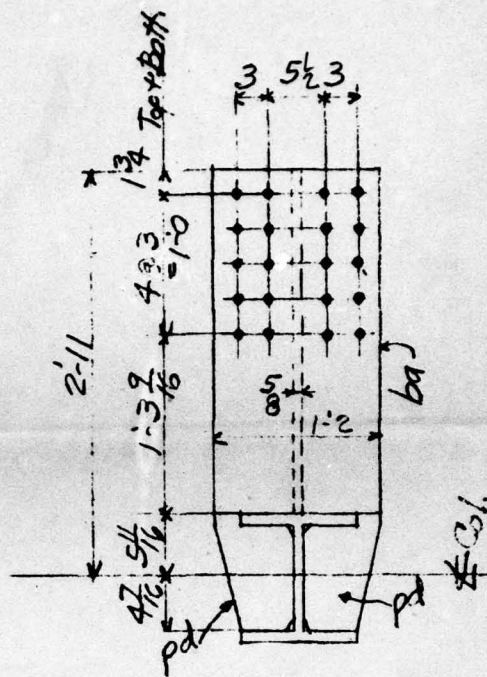
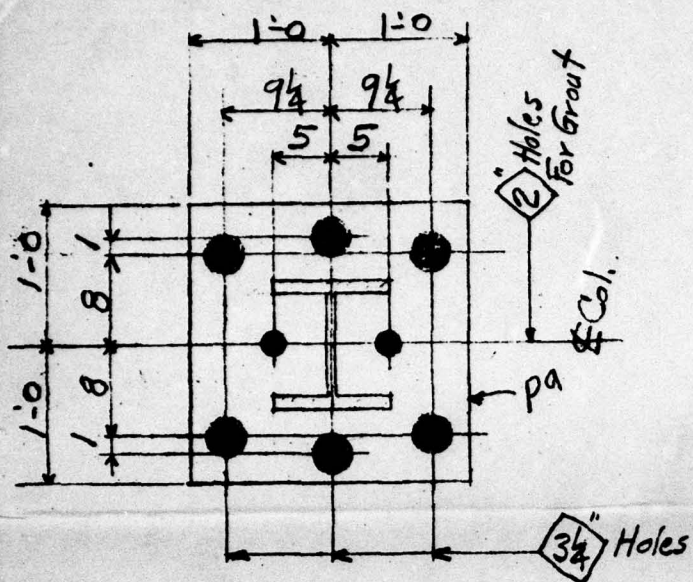
One	Col. A5-2	} ALIKE
One	D5-2	
One	A6-2	
One	D6-2	
One	A15-6	
One	D15-6	
One	A16-6	
One	D16-6	

5 @ 2 1/4 Top & Bottom  
= 10"

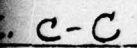
2'-6







LINE	SHIP. PCS.	DETAIL PCS.	DESCRIPTION	LENGTH OR PATTERN NO.	PIECE MARK	MATL.	DEPTS.	MILL LIST	PILE	LINE	SHIP. PCS.	DETAIL PCS.
								112				



One Col.	A5-2	} ALIKE
One	D5-2	
One	A6-2	
One	D6-2	
One	A15-6	
One	D15-6	
One	A16-6	
One	D16-6	

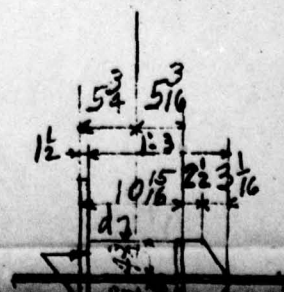
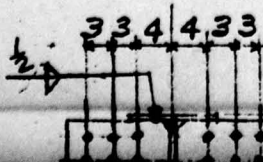
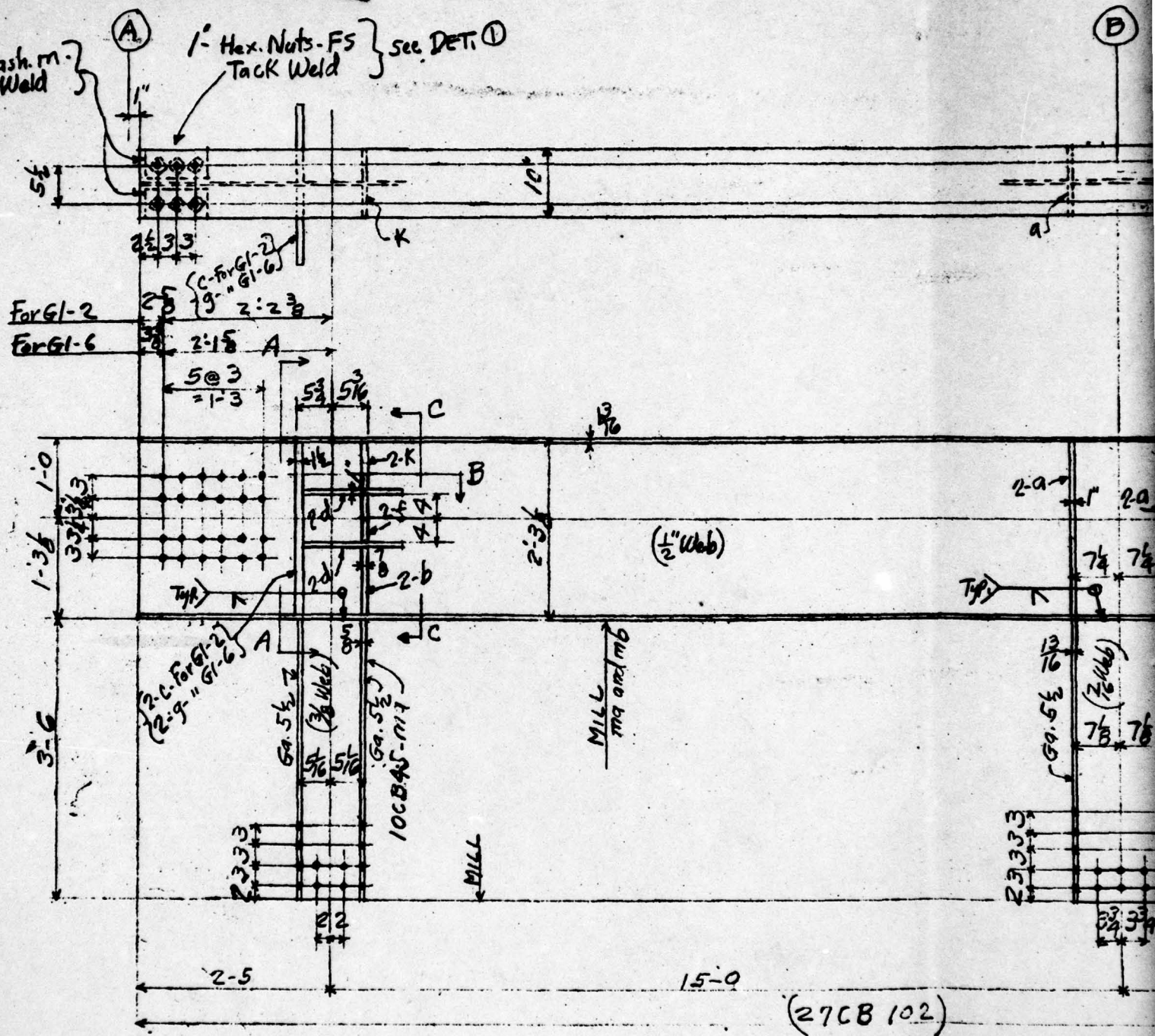
DESCRIPTION	LENGTH OR PATTERN NO.	PIECE MARK	MATH.	DEPTS.	MILL LIST	PILE										LINE	SHIP. PCS.	DETAIL PCS.	DESCRIPTION	L PA
						1	2	3	4	5	6	7	8	9	10					
6" 1/16 x 1 1/4	0-10	pd	A7	S												35				
6" 7/16 x 1 1/8	0-10	pf	↓	↓												36				
6" 1/16 x 1 1/8	0-9 3/8	pg	↓	↓												37				
																38				
																39				
																40				
																41				



**[REDACTED]**

**UNCLASSIFIED**

1				UNCLASSIFIED	
NO.	DATE	BY	REVISION		
MOLES 11/63 Unless Noted			PAINT 1-Shop Coat		
RIVETS			TT-P-86-Red Lead Base		
REF.			Lumber 2x12-Ready Mix		
DATE		DRAWN BY		CHECKED BY	
4-27-50		Lambert		GALLAGHER	
				IN CHARGE OF	
				Holbrook	
<p align="center"><b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION</p>					
Holmes and Narver Bldgs. No. 2 and No. 6				ORDER NO.	
Columns				48357	
				DRAWING NO.	
				2	





Sub Punch  $\frac{13}{16}$ " and Ream For  $1\frac{1}{16}$ " Turned Bolts

©

a

2-7

2-7

mbj

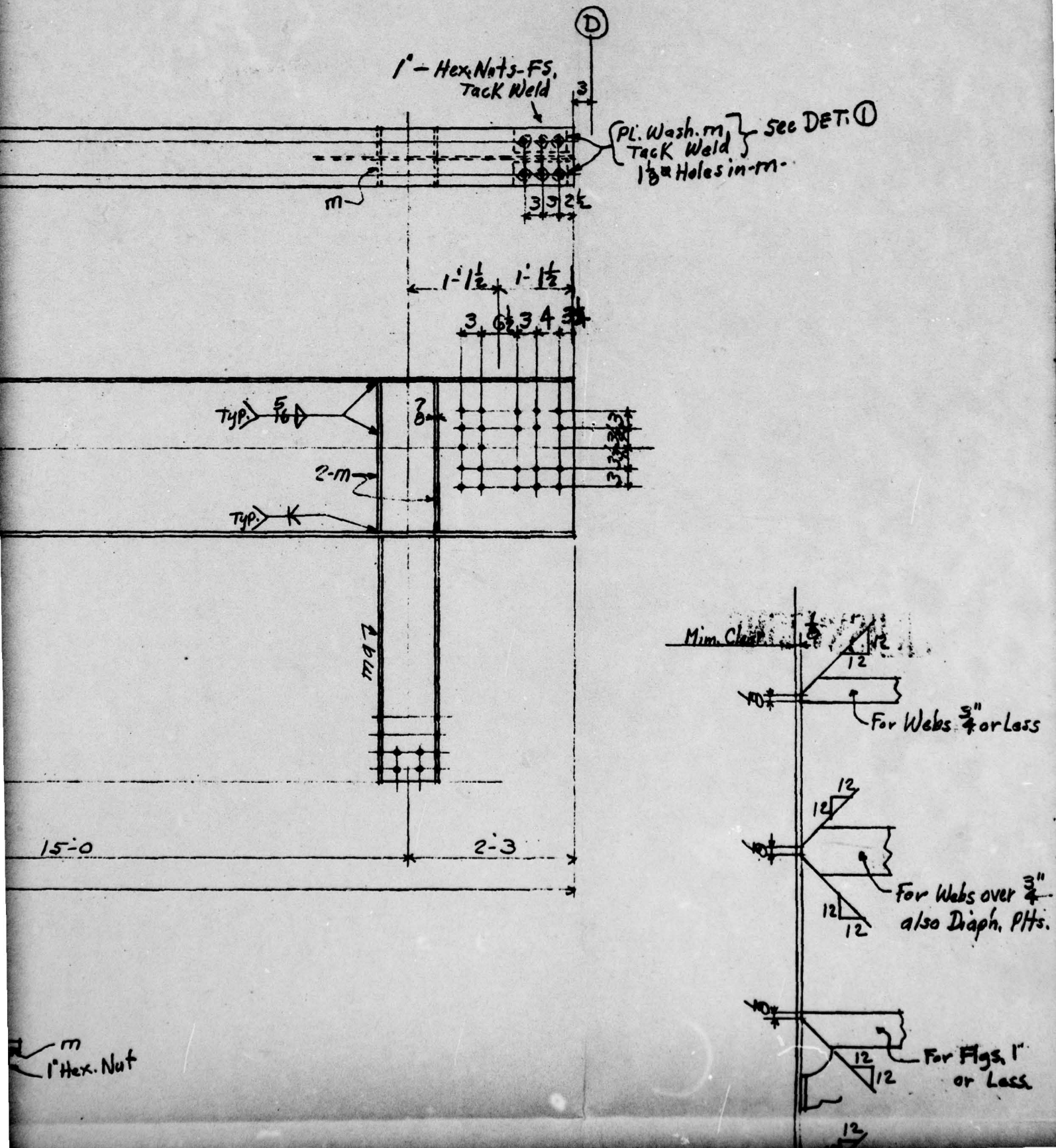
17'0

51'8

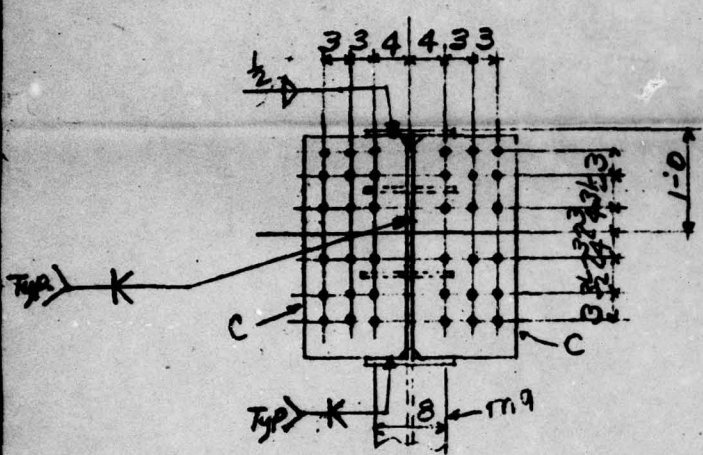
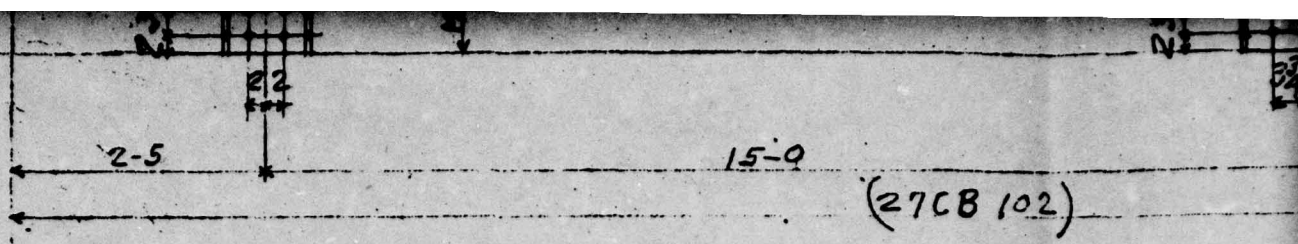
STRESS RELIEF { 2- Roof Gdrs- G1-2  
2- " " G1-6

4@3 4@4 4@3=1'0  
=1'0

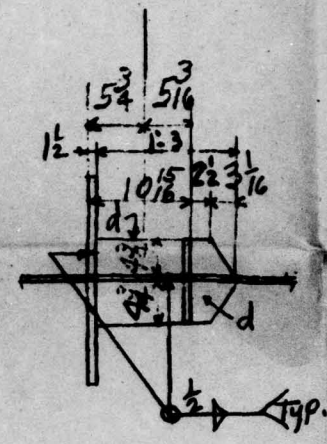
5 1/2  
m 2  
1" Hex. Nut 2



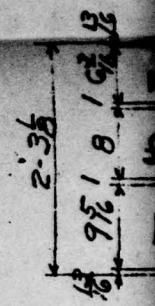




**SEC. A-A**  
For G1-2



**SEC. B**



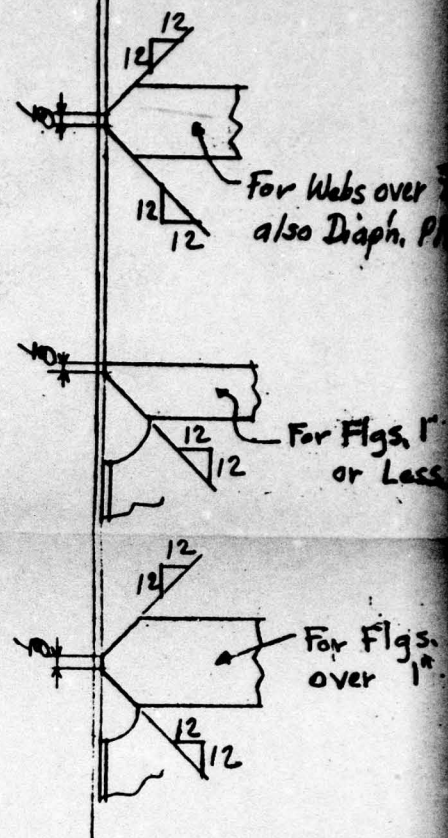
LINE	QHP. PCS.	DETAIL PCS.	DESCRIPTION	LENGTH OR PATTERN NO.	PIECE MARK	MATL.	DEPTS.	WOUNDS	PILE					LINE	QHP. PCS.	DETAIL PCS.
									1	2						
1	2		27CB 102	51-8	G1-2	A7	SBS	ML3-7	2					18		
2	2		27CB 102	51-8	G1-6		SBS	ML3-7	2					19		
3		8	10CB45 M2E	3-6 3/8	m9		S	ML4-27						20		
4		8	1ACB74 M2E	3-6 3/8	mb			ML4-3						21		
5		16	PL. 4 3/4 x 7/8	2-1 5/16	m	A7 Match Bar Quality								22		
6		32	PL. 4 3/4 x 1	2-1 5/16	a									23		
7		8	PL. 4 3/4 x 7/8	0-9 1/8	b									24		
8		4	PL. 1 1/2 x 1 1/2	2-1 5/16	c	A7								25		
9		16	PL. 4 3/4 x 1	1-3	d	A7 Match Bar Quality								26		
10		8	PL. 4 3/4 x 7/8	0-7 1/8	f									27		
11		4	PL. 1 7/8 x 1 1/2	2-1 5/16	g	A7								28		
12		48	1" Hex Nut			Comm Quality								29		
13		8	PL. 4 3/4 x 7/8	0-6 1/16	K	A7 Match Bar Quality								30		
14		16	Bar 3 x 3/8	0-9 1/2	m									31		
15			300 Lbs. Weld Rod - E7010-11-20											32		
16														33		
17														34		

41



**FIG. A2.58**





- NOTE - All Shop Welds - Full Penetration Groove  
and Fillet as noted on Details  
Girder Stress Relieved after Welding.  
Joints - beveled as shown to receive Welding

[illegible]

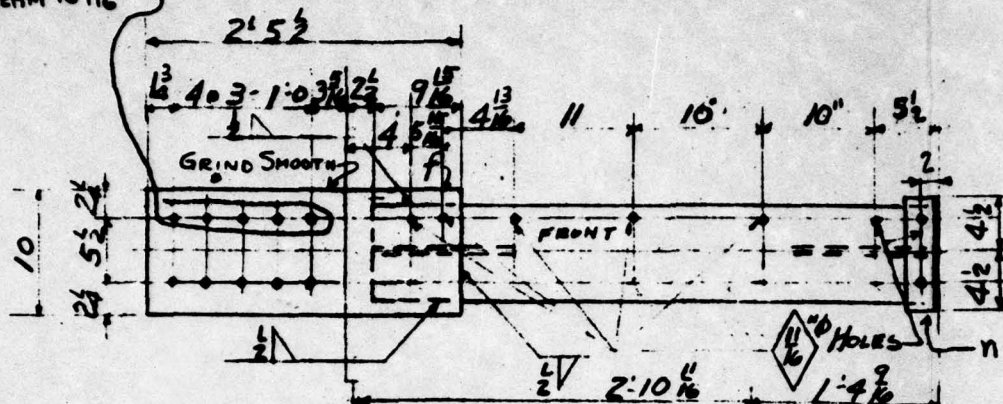
NO.	DATE	BY	REVISION	
MOLES	11/16		Unless Noted	
RIVETS			PAINT 1-Shop Coat	
REF.			TFP-86 - RE-LEAD BASE	
			LINKED OIL - READY MIXED	
DATE	DRAWN BY	CHECKED BY	IN CHARGE OF	
5-1-50	Lambert	GALLAGHER	Holtbro	
<p align="center"><b>CONSOLIDATED WESTERN STEEL CORPORATION</b> LOS ANGELES, CALIFORNIA SUBSIDIARY OF UNITED STATES STEEL CORPORATION</p>				
Holmes and Narver Bldg. No. 2 and No. 6			ORDER NO. 4035	
Roof Girders			DRAWING NO. 12	

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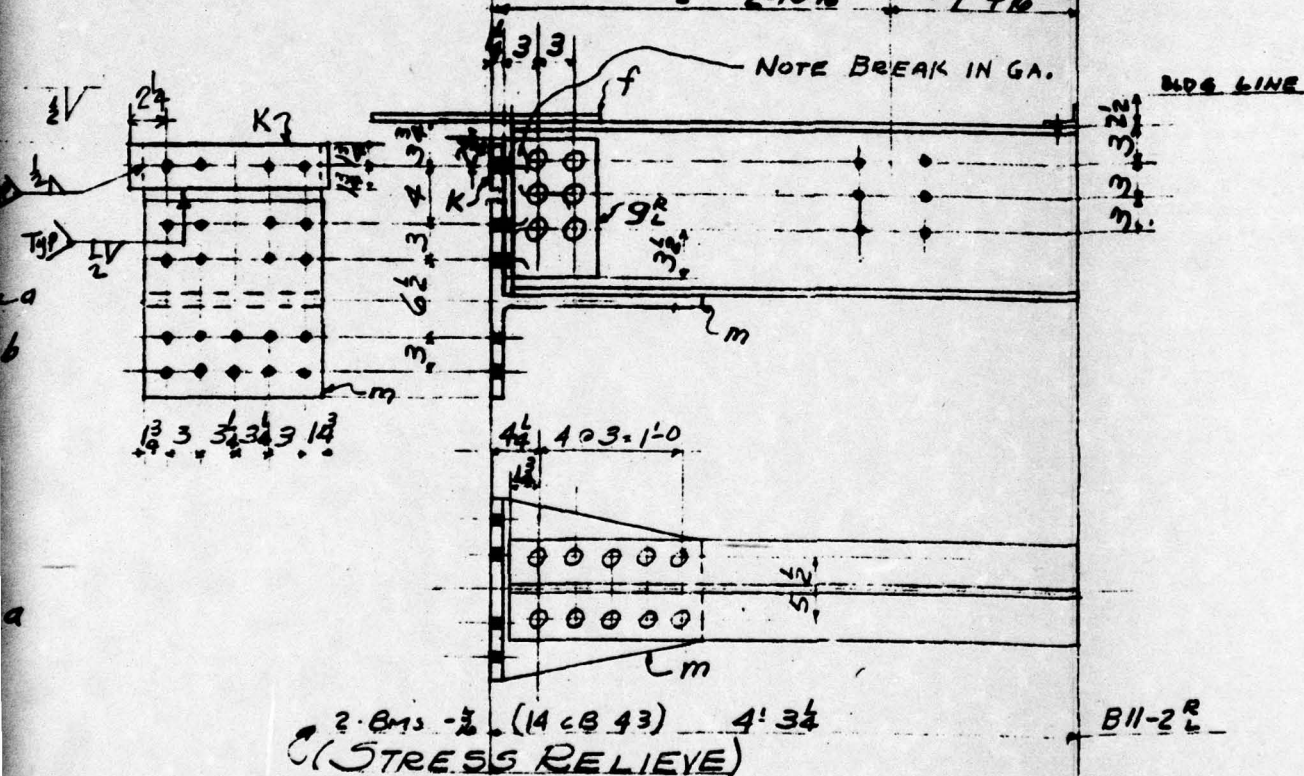
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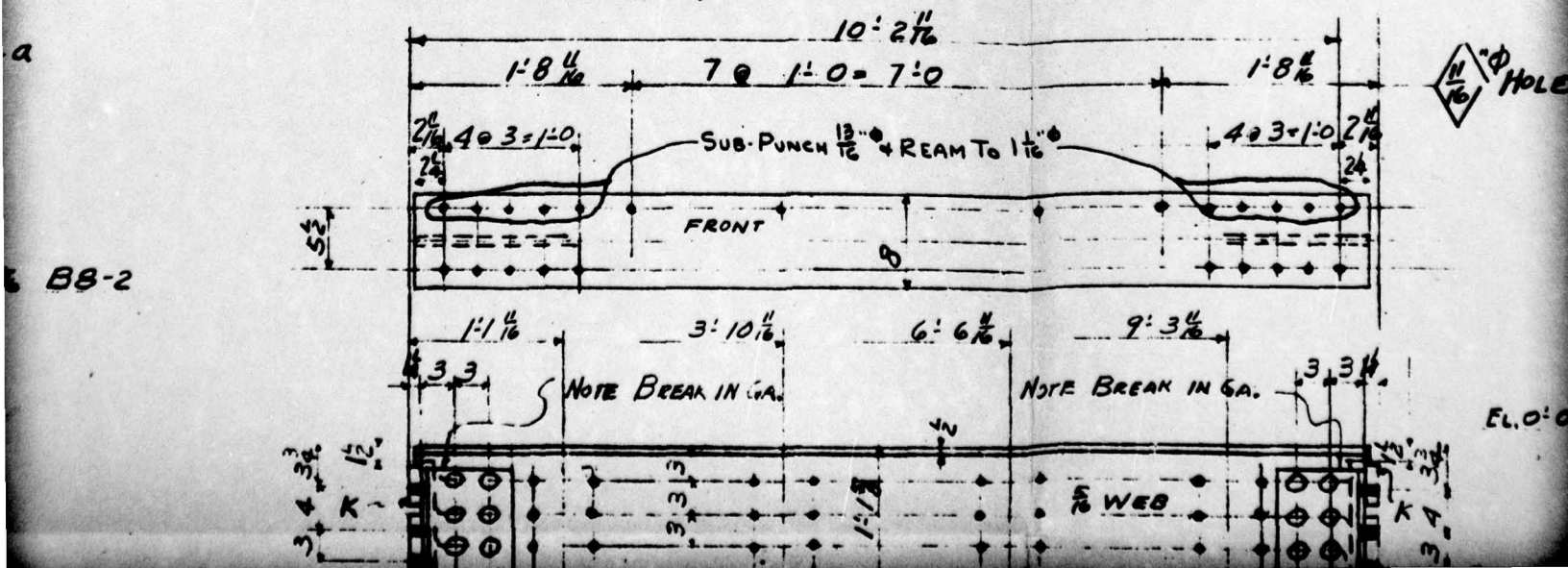




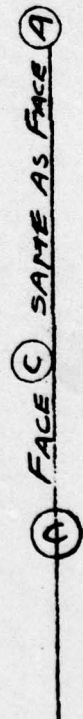
2nd



a



FL 0-0



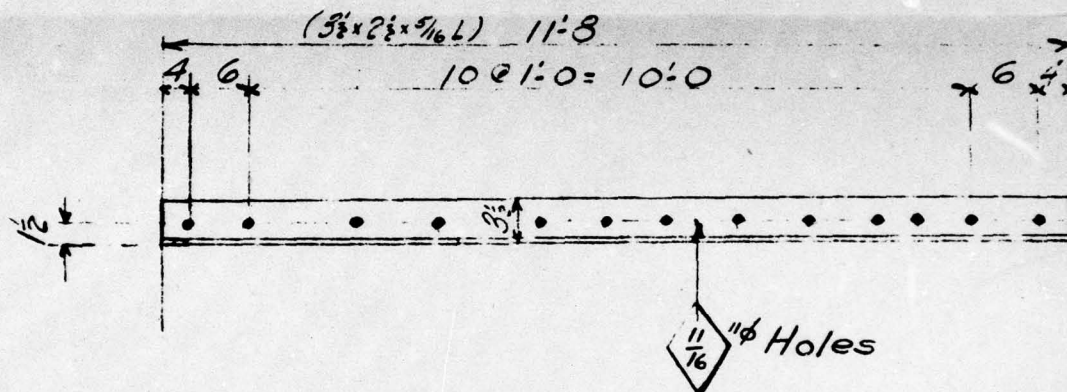


ONE BM - (24 CB 84)

STRESS RELIEVE

10' 1 1/4

10' 5 3/8



2-ANGLES-MB1  
BLDG #1

LINE	SHIP. PCS.	DETAIL PCS.	DESCRIPTION	LENGTH OR PATTERN NO.	PIECE MARK	MATL.	DEPT.	PILE	LINE	SHIP. PCS.	DETAIL PCS.	
1	1		24 CB 84	10' 4 1/2	B8-2	A7	SBS	1	18		4	L
2									19		4	FL
3	2		14 CB 43	4' 0 1/2	B11-2		SBS	ML 1/8	20		4	L 4
4	1		14 CB 43	10' 4 1/2	B12-2		SBS	ML 1/8	21		2	22
5									22		2	RE
6	2		14 CB 150	11' 8 1/2	FA10-2		SBS	ML 3-27	23		8	L 8
7	1		L 3 1/2 x 2 1/2 x 5/16	6' 1 1/2	M56		S		24		4	FL
8	1		L 3 1/2 x 2 1/2 x 5/16	7' 7 1/2	M57				25		4	ST
9	2		L 3 1/2 x 2 1/2 x 5/16	2' 10 1/2	M27				26		2	L 3
10	2		L 3 1/2 x 2 1/2 x 5/16	2' 5 1/2	M80				27		8	RE
11	2		L 3 1/2 x 2 1/2 x 5/16	11'-8	MB1		S		28			
12									29			
13									30		25	L 8
14									31		88	SN
15									32			
16									33			
17									34			

AD-A074 617

AMMANN AND WHITNEY NEW YORK  
SCIENTIFIC DIRECTOR'S REPORT OF ATOMIC WEAPON TESTS AT ENIWETOK--ETC(U)  
NOV 51

F/G 18/3

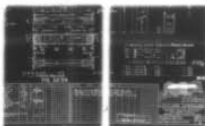
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AEC-WT-60(REF)-PT-2

NL

2 OF 2

ADA  
074617

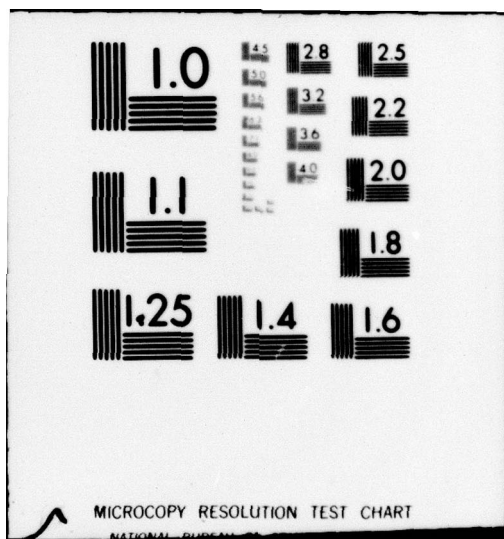


END  
DATE  
FILMED

10-79

DDC





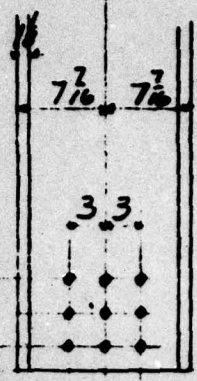




HOLES

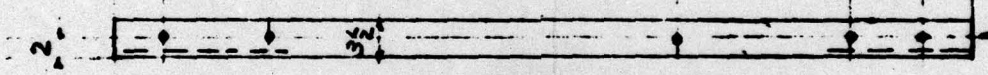
(14CB)

1'-3 1/2"  
OUTSIDE



## 2-VERTICAL GIRTS FA10-2 < STRESS RELIEVE

M56	1 1/2	11 1/2	4 @ 1'-0" = 4'-0"	11 1/2	1 1/2
M57	3 3/4		7 @ 1'-0" = 7'-0"	3 3/4	
M29	1 1/2	11	10"	1 1/2	
M80	1 1/2		4 @ 3" = 1'-0"	7 7/16	5 7/16



HOLES FOR M56-M57  
M29-M80

1-ANGLE	(3 1/2 x 2 1/2 x 7/16)	6'-1 1/2"	M56
1-ANGLE	(3 1/2 x 2 1/2 x 7/16)	7'-7 1/2"	M57
2-ANGLE	(3 1/2 x 2 1/2 x 7/16)	2'-10 1/2"	M29
2-ANGLE	(3 1/2 x 2 1/2 x 7/16)	2'-5 1/2"	M80

UNCLASSIFIED



LENGTH OR PATTERN NO.	PIECE MARK	MATL.	DEPTH.	WEIGHT
B11-2 <sup>R</sup> B11-2 <sup>L</sup> B12-2				
marked FA10-2 To				
red After Welding.				

1	NO.	DATE	BY	REVISION
HOLES 1 1/2" UNLESS NOTED.		PAINT 1-SHOP COAT		
RIVETS 1"		TT-P-86. RED LEAD BASE;		
REF.		LINSEED OIL READY MIXED		
DATE MAY 2-1950		DRAWN BY Slangen		CHECKED BY GALLAGHER
				IN CHARGE OF HOLBROOK